

1 (Proceedings commenced at 9:10 a.m.)

2 MR. GRAINGER: Good morning, everyone. I'd
3 like to call this hearing to order, in the matter
4 of licence application MN99-027, Haines Junction.
5 My name is John Grainger, I'm the Vice-Chair of the
6 Yukon Territory Water Board. I believe everybody
7 is here, so I think we can start.

8 Before going any further, I'd
9 like to introduce the Board members and our
10 consultants. To my immediate left is Mike Johnson,
11 Board member; Oliver Jim, Board member; myself,
12 John Grainger, Vice-Chair. To my right is our
13 legal counsel, Leigh Gower; Dianna Raketti, Board
14 member; Bruce Chambers, Board member. And on the
15 far right is Bob Lorimer, our technical consultant.

16 With some exceptions, the Yukon
17 Territory Waters Act requires the Board to hold a
18 public hearing when it has before it an application
19 for a type A licence. The Act also has provision
20 for the Board to cancel the hearing if no party
21 expresses an interest in participating.

22 In this case, after reviewing
23 the application from Haines Junction, the CEAA
24 screening, and the interventions received, the
25 Board agreed that there are some issues which cause
26 us some concern, and we decided that the best
27 approach to resolve those issues would be to hold a
28 public hearing in this matter.

1 The hearing will generally
2 follow the process that is outlined in our own
3 rules of procedure. First, I will ask the
4 applicant to tell us about the project, give us
5 some background; and then everyone participating
6 can ask questions. After that, everyone will have
7 an opportunity to ask any questions.

8 After we've had the applicant's
9 presentation, we're going to deviate slightly from
10 our usual procedure, and hear from Yukon's
11 Environmental Health Branch, and their presentation
12 will be followed by a question period as well. I'd
13 like everything to be directed through myself, as
14 I'm chairing the meeting.

15 Then we'll return to our usual
16 procedure. Each of the intervenors will be asked
17 to summarize their interventions; each of us will
18 get to ask questions. Haines Junction will then
19 have an opportunity to make any responses to the
20 interventions and then, finally, everyone will be
21 invited to make closing statements.

22 YTG Environmental Health are
23 attending today at the request of the Board. We
24 asked them to attend because the CEAA screening for
25 this application includes mitigation
26 recommendations pertaining to drinking water and,
27 in their intervention, DIAND recommended that this
28 mitigation should be addressed in the water use

1 licence.

2 To assist in our discussions,
3 the Board has distributed what we've chosen to call
4 a "preliminary draft licence", and we encourage you
5 to make recommendations and comments about this
6 preliminary draft licence during your
7 presentations. Those of you who have reviewed that
8 document will likely have noticed that there are
9 some gaps and some issues that need to be resolved,
10 and we are hoping that, with your participation in
11 today's hearings, our concerns about those matters
12 can be resolved. That's certainly not written in
13 stone, it's intended as a discussion point for this
14 hearing.

15 The issues that we'd like to
16 resolve through today's hearing were outlined in
17 Exhibit 4.1, which is a letter to the Village of
18 Haines Junction dated April 26, 2001.

19 We have three main areas of
20 concern that the Board would like to focus on
21 today. The first one being effluent quality
22 standards proposed. We have two concerns about the
23 proposed effluent quality standards. We'd like to
24 hear about whether the system, the sewage treatment
25 system, is designed to meet the proposed standards;
26 and we'd like to hear about the appropriateness of
27 including effluent quality standards in a CEAA
28 screening.

1 Number 2, drinking water
2 monitoring. DIAND has recommended that the water
3 use licence should include conditions for drinking
4 water quality. We would like to have some
5 clarification about who has jurisdiction in this
6 area of drinking water in the Yukon, and how that
7 authority is meeting their responsibility. We've
8 asked the Yukon Government to attend today's
9 hearing to help us with that matter.

10 And number 3, water source. A
11 fifth well has not been included as a water source
12 in the application but, in their intervention,
13 DIAND has indicated that such a well should be
14 included in the licence. We'd like to hear some
15 more on that topic, from both the applicant and
16 from the intervenors.

17 While these are the three key
18 issues that we would like to hear about, we don't
19 intend to limit any discussion on any relevant
20 topic to this application.

21 Our hearing is being
22 transcribed. We'd ask you to give your name each
23 time you speak, to assist our recorder, and to
24 speak slowly, and clearly, because he's furiously
25 copying or writing things down in shorthand. He's
26 got a tape backup, but just to give him a chance to
27 make sure that we capture everything you're saying.
28 And this is especially true if you're reading

1 something.

2 If you use any overheads or
3 slides, be sure to leave a copy with our staff, so
4 we can include these in our register.

5 At this time, I'm going to call
6 on each party to introduce the members of your
7 delegation. If you intend to ask us to accept any
8 late exhibits, we will entertain those requests as
9 part of your introductions, and then we'll hear
10 from Haines Junction to start the proceedings.

11 Now, we have received some
12 additional exhibits. I'll just read these out --
13 late exhibits -- Exhibit 8.1 is a Memorandum of
14 Understanding between Parks Canada and Village of
15 Haines Junction, as submitted by Village of Haines
16 Junction. Exhibit 8.2 is a letter from Yukon
17 Health and Social Services Department, Yukon
18 Government, to Village of Haines Junction, dated
19 January 30, 2001, submitted by the Yukon
20 Government. A third additional exhibit, a
21 Regulation Made Under the Ontario Water Resources
22 Act, Drinking Water Protection, submitted by DIAND.
23 A fourth one, a report entitled "Waterproof -
24 Canada's Drinking Water Report Card", Sierra Legal
25 Defence Fund, January 2001, submitted by DIAND.

26 Do we have any other late
27 exhibits that people would like to have on the
28 record at this time; or are these four it?

1 So we have to decide, now, if
2 we're going to accept these as exhibits and assign
3 them numbers. I guess, on the first one, Village
4 of Haines Junction, the memorandum between Parks
5 Canada and the Village... have you copied this to
6 the other intervenors and the other parties as of
7 yet?

8 MR. CORNETT: Dan Cornett, with the Village
9 of Haines Junction. This Memorandum of
10 Understanding was just recently signed. We've
11 actually just passed it to the Board staff, and I
12 believe it has been distributed to the other
13 intervenors.

14 MR. GRAINGER: DIAND, have you copied these
15 additional exhibits to the other parties?

16 MR. SHERSTONE: Yes, we have, Mr. Chairman, and
17 circulated them this morning.

18 MR. GRAINGER: Are there any objections from
19 anyone, that we enter these as additional exhibits
20 and assign them exhibit numbers?

21 MR. CORNETT: No objections.

22 MR. GRAINGER: Okay, then we will accept these
23 and assign them numbers: 8.1 for the Memorandum of
24 Understanding between Parks Canada and the Village;
25 8.2, the letter from Yukon Health and Social
26 Services to the Village of Haines Junction, dated
27 January 30th, from the Government of Yukon; 8.3,
28 Regulation Made Under Ontario Water Resources Act,

1 from DIAND; and 8.4, the report entitled
2 "Waterproof - Canada's Drinking Report Card",
3 Sierra Legal Defence Fund, January 2001, submitted
4 by DIAND.

5 Perhaps what I should do now,
6 too, I would like the Board to have an opportunity
7 to review these, and we're going to do that in a
8 second, but I've been remiss... I would like to
9 have the parties, present today, introduce
10 themselves, for us and for the record, starting
11 with the Village of Haines Junction delegation.

12 MR. CORNETT: Thank you, Chairman. My name
13 is Dan Cornett, with Access Consulting Group. We
14 are representing the Village of Haines Junction in
15 this water licence matter. To my left is John
16 Farynowski; he is the Mayor of the Village of
17 Haines Junction and will be speaking to certain
18 issues, and providing an overall context for the
19 Village. To my right is Jeff Boehmer, from YTG,
20 Community and Transportation Services, Engineering
21 Development Branch, as a program engineer; and he
22 will be speaking with regards to the new water
23 source proposed for the Village of Haines Junction.

24 MR. GRAINGER: Thank you, Mr. Cornett. I
25 guess starting at the back....

26 MS. RICHARDS: Lynn Richards, Acting Manager
27 for Environmental Services, Health and Social
28 Services, Yukon Government.

1 MR. GRAINGER: Thank you, Lynn.

2 MR. ENNS: Vic Enns, Environment Canada.

3 MR. SHERSTONE: David Sherstone, Regional
4 Manager of Water Resources for Indian and Northern
5 Affairs. On my left is Mr. Ray Breneman, who is
6 the Warden Manager, Ecosystem Management, Kluane
7 National Park, with Heritage Canada. To my right
8 is Bill Slater, who's head of the Environmental
9 Assessment and Planning Section, Water Resources
10 Division DIAND. And to his right is Ms. Brenda
11 Casella, who's the Environmental Assessment Officer
12 in Bill's shop, Environmental Assessment and
13 Planning.

14 MR. GRAINGER: Thank you, Mr. Sherstone. What
15 I'd like to do is maybe just take 10 minutes or so.
16 Like to pass out these exhibits to the Board
17 members and let them have a quick look at them. So
18 we'll just adjourn proceedings for 10 minutes,
19 while we do that.

20 (Proceedings adjourned)

21 (Proceedings reconvened)

22 MR. GRAINGER: If we're all ready, we'll get
23 under way again. The Board's had an opportunity to
24 look at these exhibits and, as I said earlier, we
25 will accept them. Just a comment, though... it
26 would be really helpful to our proceedings if such
27 exhibits could come in sooner than they did today.
28 I just remind and ask intervenors and parties to

1 our process and our proceedings to try and do that.
2 There may be reasons why you couldn't, but please
3 endeavour to do that, it would certainly help us
4 out.

5 I guess I'd invite Haines
6 Junction, then, to give us their presentation
7 today. And just remind everybody that, when they
8 do speak, including myself, to identify themselves
9 for our court reporter.

10 **PRESENTATION BY THE VILLAGE OF HAINES JUNCTION**

11 MR. CORNETT: Thank you, Mr. Chairman. I'm
12 just going to move up to the front to actually run
13 through our presentation there, and speak from that
14 microphone.

15 A couple of brief comments
16 here, before we get started. I think you've laid
17 out, for us, how you actually intend to deal with a
18 couple of items in relation to this hearing (it's a
19 bit, sort of, unique in relation to the issues that
20 you're asking us as the applicant to speak to), as
21 well as a draft water licence.

22 So, we welcome the opportunity
23 to participate in the hearing, and to assist the
24 Board in their deliberations. Our presentation
25 will provide the Board with an overview of the
26 water and wastewater treatment and disposal system;
27 as well as, we'll be speaking to the effluent

1 quality standard issues, the drinking water
2 monitoring and the new water source questions that
3 the Board has raised, and then providing a summary
4 on those issues, as well. At that point, we didn't
5 include our comments on the draft licence... I can
6 speak to those. We do have something prepared for
7 the Board, but we'll run through this presentation
8 first, and deal with that.

9 The presentation, itself, will
10 be done by all our team members, so there will be a
11 couple slides that both Mayor John Farynowski and
12 Jeff Boehmer will be speaking to.

13 As I had mentioned, our
14 presentation overview will be speaking to some
15 background regarding our application; the water
16 supply; the wastewater treatment and disposal
17 system, to give the Board and members an idea of
18 the system. And then speaking to the three issues
19 that the Board has raised: effluent quality
20 standards; drinking water monitoring; water source.
21 And then providing a bit of a summary.

22 At this point, I'd like to turn
23 this over to Mayor Farynowski, to speak to some of
24 the background issues.

25 MR. FARYNOWSKI: Mayor John Farynowski, from
26 Haines Junction. Just to go over the background,
27 the Village of Haines Junction operates a municipal
28 water supply and sewage treatment and disposal

1 facility for the benefit of the community and the
2 surrounding settlements. The application for the
3 water use licence was filed with the Yukon
4 Territorial Water Board in October of '99. The
5 Village has worked cooperatively with all the
6 regulators to complete the assessment process and
7 licensing process.

8 Presently, we're operating the
9 facility without a valid water licence, and we feel
10 the need to complete the licensing process, and
11 secure a licence.

12 Just one additional comment
13 there. Mr. Chair, you noted that number 5 wasn't
14 on the application. And when the application was
15 made, number 4 was an operating well at the time
16 but, now, it is not. So what was sort of -- number
17 5 was when we needed/if we needed, because we were
18 having some troubles with 4. Now, the future has
19 become the present, and that's why we feel it
20 important that number 5 be included on this
21 licence, because of the time factors. And we feel
22 that the process is quite time consuming, and we
23 want to get started on number 5.

24 MR. CORNETT: Thank you, John. I'd now like
25 to provide a bit of a summary of the water supply
26 for the Village of Haines Junction.

27 The system comprises a piped
28 and trucked water supply system. There are four

1 water wells that the Village has drilled; wells
2 number 1, number 2, number 3 and number 4.
3 Currently, only well number 3 is in operation. And
4 in November of 2000, well number 4 was taken out of
5 service. So the Village is relying on a single
6 well for its community water supply.

7 This well currently meets all
8 the Canadian environmental quality guidelines for
9 drinking water quality. And the water supply is
10 treated, using a 12% sodium hypochlorite solution,
11 and then pumped, through pumphouses 1 and 2,
12 circulated through the community.

13 As I said here, the pumphouse
14 number 1 and 2 distribute water to the community,
15 and there is an in-line storage reservoir, with a
16 363 cubic metre capacity.

17 This slide, here, or figure,
18 actually shows the water wells in location. A bit
19 of an overview that way. Down here, we have wells
20 1, 2 and 3, with pumphouse number 1.

21 I'm just looking for my handy-
22 dandy expander here, but I don't see it on the
23 screen. There we are. I'll just try and blow this
24 up a little bit.

25 So the Dezadeash River, flowing
26 down here, the bridge along the Alaska Highway,
27 wells 1, 2 and 3, currently number 3 the only one
28 in use, with pumphouse number 1. Well number 4 is

1 kind of located to the south end of town. It has
2 been taken out of service. And pumphouse number 2
3 is located here, as well. Treatment is provided in
4 both of these pumphouses.

5 The proposed new well number 5
6 in the expansion area for the Village, and we'll be
7 speaking more to that later.

8 As I said, the new well supply
9 and location is currently under study, and there is
10 a real desire and the need to have a new water
11 well, a supply well, for the Village, to insure the
12 adequacy of source water for the community. And
13 this has become certainly more paramount, as an
14 issue. As the Mayor indicated, this licence
15 application was filed in 1999; things have actually
16 occurred within that time frame, and there is a
17 need to deal with a new well supply for the
18 community.

19 I'd like, now, to just touch on
20 the wastewater treatment disposal system for the
21 Village. It's a gravity fed collection system,
22 pumped by a lift station, via forcemain, to a
23 sewage treatment and disposal facility. The
24 facility also receives eductor truck effluent from
25 the surrounding area.

26 The facility type is a five
27 celled lagoon, providing long term storage of
28 effluent. I can just go to a figure here, to

1 demonstrate this. This is a drawing of the sewage
2 treatment and disposal system. I said there's five
3 cells; two anaerobic cells and three aerobic cells.
4 The facility is fenced, gated, locked, to provide
5 for public safety and security.

6 The lagoon has only discharged
7 twice; once in 1990 and once in 1992. And that was
8 really from a test discharge, to look at the
9 wetlands treatability downstream from the lagoon
10 system. And currently receives an average loading
11 of around 240 cubic metres per day.

12 The facility provides secondary
13 treatment, and was designed for secondary
14 treatment, with discharge to a natural wetlands
15 located within Kluane Park, and then to the
16 Dezadeash River, providing a tertiary treated type
17 system.

18 And this figure, here, shows
19 the sewage treatment facility in relation to the
20 Dezadeash River and Kluane National Park. We have
21 the facility here, which discharges... the water
22 monitoring station HJ-4. It flows along, into an
23 overflow ditch. There's a small, little, wetlands
24 located downstream. This ditch, here, runs through
25 a pasture land presently now owned by a Champagne-
26 Aishihik First Nation, crosses a culvert in the
27 highway, and then into a wetlands complex within
28 Kluane National Park, adjacent to the Dezadeash

1 River.

2 These stations locations on
3 here are the water monitoring stations from the
4 now-expired water licence.

5 Just a note here, that these
6 wetlands were the subject of a pre-discharge
7 monitoring study undertaken by Klohn Leonoff, for
8 the Village of Haines Junction, 1991-1992.

9 A couple little details on the
10 facility, itself. The two anaerobic primary cells,
11 4.5 metres in depth, providing 2300 cubic metres of
12 storage. The facultative aerobic cells, there's
13 three of them, with 2.6 metres deep, providing a
14 combined total long term storage of 306 cubic
15 metres of storage. There's also a lift station
16 connected to an emergency lagoon. This was the old
17 lagoon that was decommissioned prior to the new one
18 being constructed. It's used for emergency
19 purposes; has been used once, I believe, in 1997,
20 when they had an 18-hour power outage, and effluent
21 was retained within this emergency lagoon. Again,
22 that location is right here.

23 This table, here, presents a
24 Summary of the Present and Predicted Freshwater
25 Demand and Wastewater Production, for our present
26 population, approximately 800 people. For the
27 purposes of calculating predicted water use, we had
28 gone back for the previous 10 years, and looked at

1 population growth estimates. And these range from
2 3 to 5%, so we used a conservative 3% growth
3 estimate for our 20-year licence term, that we're
4 looking for the licence, and a predicted population
5 of 1483 persons.

6 Present average daily water
7 demand is around 330 cubic metres per day, using a
8 430 -- sorry, 413 litre per capita day. Water use
9 has, and continues to have, decreased. As an
10 example, UMA had done a study on water use in 1988,
11 a population of 505 persons. And, at that time,
12 the average per capita water demand was 584 litres
13 per capita per day. So we can see, at present,
14 we're down to 413 litres per capita per day, that
15 water use has dropped on a per capita basis, and we
16 expect that to continue. The Village is reducing
17 bleeder systems and certainly using other
18 conservation measures.

19 I think we had our mayor
20 actually on the radio, asking people, when they had
21 problems with well number 4, to actually shower
22 with a friend, so... they have been doing things to
23 conserve water.

24 On that basis, for long term
25 freshwater demand, we've used a 450 litre per
26 capita estimate for demand, which translates into
27 an average daily water demand of 667 cubic metres
28 per day. And this is what we are presently looking

1 to have licensed in the new application.

2 On the wastewater production
3 side, presently the average daily wastewater
4 production, 237 cubic metres per day. And,
5 roughly, that's about 72% of the water, that is
6 pumped through the wells, actually ends up in the
7 lagoon system. So there's a loss of approximately
8 28%.

9 I'd now like to turn our
10 attention to questions that the Board had raised,
11 regarding a licence hearing issue on effluent
12 quality standards. And this sort of follows in
13 line with the earlier presentation, here, on the
14 facility.

15 The sewage treatment and sewage
16 disposal facility was initially constructed in
17 1983, and completed in 1986. And the facility was
18 designed to provide for secondary treatment of
19 effluent.

20 Associated Engineering Services
21 Limited, a 1980 facility analysis report,
22 recommended effluent quality requirements. And
23 these effluent quality requirements are noted here:
24 B.O.D., 65 milligrams per litre; suspended solids,
25 65 milligrams per litre; coliform bacteria, 200,000
26 counts per 100 ml; oil and grease, 5; and pH, 6 to
27 9.

28 The point here is that these

1 effluent quality standards, recommended by the
2 design engineers, were fairly similar to what was
3 in the licence effluent standards for the now-
4 expired licence, MN89-001.

5 This table, here, just provides
6 a bit of a summary of what was recommended for
7 design, and compares that to present day
8 situations. The facility was designed for a
9 population of 1100 persons, you know, roughly a 690
10 litre per capita per day demand. Which roughly
11 translates into a 683 cubic metres per day water
12 demand. Presently, the Village is using 413 litres
13 per capita per day, and this translates into
14 approximately 330 cubic metres per day.

15 For our 20-year design horizon,
16 which was a previous slide that we had spoke to,
17 for a population of roughly 1500 people in the year
18 2020, we are looking at roughly 670 cubic metres
19 per day demand.

20 The long and short of this...
21 it looks like, for our design horizon, 20-year
22 licence term that we're asking, we are going to be
23 still within the design parameters for flow rates
24 for the facility. And that's certainly important
25 when we're looking at the long term here, for the
26 20-year horizon.

27 Just some other numbers here.
28 1989, population 550; the 2000 design population, a

1 thousand; and presently, we're around 800 persons.
2 The design storage was for a 12-month storage, with
3 annual discharge to the wetlands, Dezadeash River,
4 from the June 1 to September 30 window. And the
5 present operation has only discharged twice since
6 construction.

7 The facility has performed to
8 design expectations. Certainly, within our water
9 licence application, we have presented the water
10 quality results from the two discharge periods, and
11 those results indicate that the Village has been
12 able to meet the present licence effluent standards
13 that were in the now-expired licence.

14 During the environmental
15 assessment process, both Parks Canada and DIAND had
16 raised a concern with the present effluent quality
17 standards, and were looking to have more
18 restrictive effluent standards placed in the water
19 licence. And the bases for that were the
20 Guidelines for Effluent Quality and Wastewater
21 Treatment at Federal Establishments, a 1976
22 Environment Canada guideline document. And this
23 formed the basis for what Parks Canada and DIAND
24 felt were necessary effluent quality standards to
25 insure protection of the downstream ecosystem; in
26 particular, the national park.

27 The concern that the Village
28 had, was, should the facility design capacity be

1 exceeded, more restrictive effluent standards may
2 not be met. This doesn't appear to be the case, on
3 the basis of our present operation, predicted water
4 use, so on and so forth. However, should
5 unexpected increases in population, or for whatever
6 reason there would be more demand placed on the
7 sewage treatment system, potentially, the system
8 was not designed to meet more restrictive effluent
9 standards. It was designed to meet secondary
10 standards. And this concern was expressed to both
11 Parks Canada and to DIAND during the CEAA
12 assessment process.

13 The Village does recognize the
14 importance of Kluane National Park. They
15 recognized the UNESCO World Heritage Site. And as
16 they have done in the past, the Village has worked
17 cooperatively with Parks Canada to insure
18 protection of that resource. And they will
19 continue to do so.

20 In that vein, there was a
21 Memorandum of Understanding that was -- it was
22 noted in the CEAA screening, for Parks Canada and
23 the Village to jointly work together to share some
24 responsibility for upgrading the facility should it
25 be required at a future date. This Memorandum of
26 Understanding has now been placed before the Board
27 as Exhibit 8.1. And, really, what this MOU has
28 done, has taken some of the onus off of the

1 Village; that, should they need to upgrade the
2 facility, as a result of not being able to meet
3 effluent quality standards, that Parks Canada would
4 be there to jointly assist them with the provision
5 of technical services and advice, and certainly
6 seeking financial support for that facility.

7 So, on that basis, the Village
8 accepted the requirement for more restrictive
9 effluent quality standards.

10 Now, as an additional note, Mr.
11 Chairman, you had asked a couple of points in
12 relation to that issue; the applicability of having
13 CEAA recognize more restrictive -- or, recognize
14 effluent quality standards. I guess the feeling
15 here is, if there is a need demonstrated under
16 CEAA, then I guess that's the initial place where
17 it should be addressed. Certainly the Board has to
18 be a part of that. In this particular instance,
19 there was a recognition of a significant downstream
20 resource, and that was addressed through the CEAA
21 process. The applicant didn't really have much of
22 a choice in that; we just tried to work with it,
23 and come out with the best situation for the
24 Village.

25 I'd now like to talk about the
26 drinking water monitoring issue. This was another
27 licensing issue that the Board requested that the
28 applicant speak to.

1 The Village's goal is to
2 provide a safe, reliable, potable water supply to
3 the community, at an affordable cost. That's what
4 they're in the business of providing.

5 Presently, the water supply is
6 treated through chlorination, and routinely
7 inspected and maintained. The Village operators
8 are trained through B.C. wastewater management
9 courses, and are licensed municipal operators.
10 They routinely monitor on a daily basis for
11 residual chlorine, and periodic faecal and total
12 coliform samples. And I believe these are
13 collected every two weeks, and sent in to
14 Environmental Health, here in Whitehorse. The
15 Village conducts a semi-annual chemical analysis of
16 the raw water supply, and all the results are
17 reported. Presently, we have been reporting all of
18 those results to the Yukon Territory Water Board.

19 The Village will continue to
20 ensure a safe, reliable, potable water supply, by
21 treating, testing and reporting. From our
22 perspective, whether or not we conduct this
23 activity and report the results to the Water Board,
24 or to YTG medical health officer, it doesn't really
25 matter to the Village. We're doing it; we'll report
26 it to whomever. And that's really not at issue to
27 the Village.

28 I'd now like to turn the

1 presentation over to Mr. Jeff Boehmer, to speak to
2 some of the water source issues, here, for the new
3 supply.

4 MR. BOEHMER: Thank you, Dan. It's Jeff
5 Boehmer, with the Village of Haines Junction
6 delegation.

7 Dan, if you could show that
8 slide, that shows all the wells in relationship to
9 the roads and network in the Village, that would be
10 great.

11 The first community well was
12 built in 1974. It was down by the Dezadeash River.
13 It was discovered to be a shallow aquifer, which is
14 hydraulically connected to the Dezadeash River.
15 Water quality was good, by current standards, and
16 the only problem with that well is that it was
17 cold, and they had to heat the water, during the
18 winter, to insure non-freezing of the water mains.

19 That well was followed up in
20 1977, by well number 2, which was -- they drilled
21 it farther into the aquifer below the one
22 encountered in well number 1. The quality... I
23 understand that, at that time, they had a problem
24 with sediment, and it still has persisted.

25 Then, in 1980, they drilled
26 well number 3, which is the current community well,
27 and they used well number 2 to monitor well number
28 3.

1 Back then, the Village was an
2 LID, a Local Improvement District, basically
3 assisted by the Government of Yukon. In the early
4 '80s, the Government of Yukon decided to get out of
5 that business, and turn the reins back over to the
6 municipality, and there was an effort to look at
7 improving the Village of Haines Junction water
8 system.

9 At that point, a report was
10 done, and Dan has alluded to the 1988 UMA report,
11 which suggested that the Village would need another
12 well; well number 4. '88-89, we started into the
13 process of drilling wells. Initially, the first
14 well was drilled right at the water tower. That
15 was decided that would be the most advantageous
16 point to drill a well. It turned out to be a dry
17 hole. I think it's some 820-860 feet, it's a dry
18 hole. We moved across the road and we drilled well
19 number 4.

20 Well number 4 has been in
21 operation since '91. It's had problems with
22 sediment, and the Village has worked quite
23 diligently to figure out ways to get the sediment
24 out of the water, and work and pump at a constant
25 rate, or pumping it at a lower rate, to insure that
26 a lot of the sediment from the well wasn't getting
27 into the Village system.

28 Finally, in November of 2000,

1 it was decided that that whole process, which had
2 been sort of entered into for the last eight-some
3 years, just wasn't working, and it was time to
4 abandon the well.

5 Part of the reason for drilling
6 well number 4 was, well number 3 seemed to be --
7 the water level was dropping. It was decided, I
8 think, in the '88 report, that it could sustainably
9 provide about 100,000 cubic metres of water per
10 year. And it had been dropping -- the water level
11 in the well had been dropping.

12 With the use of well number 4,
13 that water level has come up, back to its previous
14 levels, and it's been able to recharge itself.

15 Dan, do you want to flip to the
16 slide that shows the demand and use.

17 So, currently, in this water
18 licence application, the Village of Haines Junction
19 is applying for a usage of 243,000 cubic metres per
20 year. Well 3 supplies 100,000 cubic metres per
21 year. So we have a shortfall, there, of 143,000.
22 That's why we're working with the Village, and the
23 Village is moving ahead, looking at drilling well
24 number 5.

25 Dan, could you go to the slide
26 that shows the approximate location in relationship
27 to that conceptual plan.

28 Back in '91, we, working with

1 the Village of Haines Junction, looked at
2 developing an area -- if you're familiar with
3 Haines Junction, along the west Alaska Highway, up
4 in behind the Stardust Motel, and sort of
5 sandwiched in between there and the light
6 industrial subdivision -- we did a conceptual plan,
7 and, fortunately for us, the proposed location,
8 from the work that was done by our geologist in the
9 area, was to put it roughly there, and it coincides
10 with what we've got as a future school site. So,
11 hopefully, if we're successful in drilling an
12 exploratory well, we can nicely fit it into the
13 future Village system.

14 That is our plans... is to
15 drill the exploratory well, and go from there.
16 Certainly, it's been a risky proposition, drilling
17 in the Village. We've drilled a number of wells,
18 and they've been fairly expensive, and it's been a
19 hit and miss situation but... that's the plan.
20 Thank you.

21 MR. CORNETT: Thanks, Jeff. Just to provide
22 a bit of a summary on our presentation here...
23 again, the Village operating a municipal water
24 supply and sewage treatment disposal facility for
25 the community; and the Village will continue to
26 insure a safe, reliable, potable water supply, by
27 supplying and treating, and reporting all its
28 results.

1 The Village will also continue
2 to maintain the wastewater treatment and disposal
3 facilities in a manner that safeguards the
4 integrity of the local environment, recognizing the
5 downstream sensitivities of that.

6 An application for a water
7 licence was filed with the Board in October of
8 1999, and the Village has worked with -- through
9 the CEAA process, and licensing process, to insure
10 concerns have been addressed. And there is a real
11 need to secure a water licence for the Village.

12 There certainly has been some
13 frustration, on the part of the Village, the length
14 of time that it has taken to undertake these CEAA
15 screenings, and the review process, and certainly
16 left the Village in a bit of an untenable position,
17 by operating without a valid water use licence.
18 Hopefully, that process can be addressed.
19 Certainly the Board's new approach to having a
20 draft water licence beforehand, I think may be
21 something that can help in that regard.

22 At this point, I guess we can
23 now, shall we say, move on to the draft water
24 licence, and we have a few comments on that for the
25 Board.

26 Mr. Chairman, I wasn't really
27 too sure how you wanted to deal with comments on
28 the draft licence; whether you want it as part of

1 our presentation, or we're dealing with that as a
2 separate matter. But if the Board wanted to hear,
3 from the Village, comments that we do have, we can
4 provide them at this time.

5 MR. GRAINGER: Yes, that would be fine, to do
6 that. Could I also just ask you if you could
7 provide the Board with a hard copy of your Power
8 Point presentation.

9 MR. CORNETT: Yes, I can do that.

10 MR. GRAINGER: Okay, thank you. And, yes, go
11 ahead with this.

12 MR. CORNETT: We've reviewed the draft water
13 licence and, as I've mentioned earlier, I think
14 this is a positive step that the Board has
15 undertaken, to try and provide draft licences in
16 advance, to have these things out for review, and
17 hopefully that can help with the licensing process,
18 in speeding things along. So, certainly that's
19 viewed as a positive step and the Board should be
20 congratulated on that.

21 And I'll just, what do we say,
22 walk through the licence, clause by clause or blow
23 by blow.

24 The Village of Haines
25 Junction... just change the address to Box 5339,
26 just to correct that. And in the location for the
27 system, include "Dezadeash River at Village of
28 Haines Junction", inserting that. And we believe

1 that there should be inclusion of well number 1 and
2 well number 2, in this licence clause, as well.
3 Even though they may not be currently utilized,
4 they may be at some point, or they are being used
5 for monitoring, so have them just, at least,
6 recognized. And certainly, we'd like to encourage
7 the Board to recognize well number 5.

8 Licence expiry date... we're,
9 again, looking for a 20-year licence.

10 Part A... we have no comments
11 on that, sections 1 to 7. Representation workings
12 and undertakings... no comment, except a bit of a
13 comment on clause number 4. This appears to be a
14 new clause that the Board has inserted in a
15 municipal licence. This appears to be a good
16 clause. It's basically right out of the
17 regulations, and I think it's going to lead to
18 process improvements. Not every minor situation,
19 that triggers a water use, will have to be amended
20 on every occasion. And it appears that there is
21 some recognition that these things have to build in
22 some flexibility to deal with ever-changing
23 municipal operations. We see that as a good thing.

24 Other licences, clause number
25 7... just a comment that the Village has no concern
26 with complying with requirements respecting Public
27 Health, pursuant to the Public Health and Safety
28 Act. As we noted earlier, we'll provide our

1 reports and notification, etc., directly to them.
2 It doesn't really matter to the applicant, whether
3 it's to the Board or to the Medical Health Officer.
4 Their intent is just to insure it's done.

5 Correspondence... clause 8,
6 here again, recognizing the change to the box
7 number for the Village of Haines Junction.

8 My clause numbers get mixed up
9 here, when I reprinted something. Anyhow... where
10 am I at?

11 Clause 11... a similar comment
12 to what we had made previously; recognizing well
13 number 1 and number 2, and including well number 5.

14 Clause number 12... recognition
15 of a 20-year licence term.

16 And we have no comments on the
17 reports or annual reporting requirement.
18 Currently, the Village undertakes that. No comment
19 on clause 17 or 18.

20 Part B... the only comment that
21 we had here is in relation to clause number 23.
22 Certainly was a requirement of the CEAA screening,
23 that there be no direct connection between the
24 Dezadeash River and the wetlands, when an outfall
25 discharge from a facility occurs. However, I mean,
26 the Village could argue that, if we have more
27 restricted effluent standards on the facility, and
28 that's the last point of control, what difference

1 does it make downstream? It could possibly be
2 problematic to the Village should they actually
3 need to discharge effluent. It hasn't been a
4 problem but, again, it's maybe an eventuality. So
5 a comment on that. I don't really think we have a
6 problem with it but, again, if we are putting a
7 last point of control at the sewage facility, then
8 do we need to be concerned with what actually is
9 happening downstream?

10 Regarding the effluent quality
11 standards... I think we've talked about that in our
12 presentation. The Village's feeling here is that,
13 yes, it has worked with Parks Canada and DIAND, as
14 part of the CEAA process, to have the federal
15 guidelines included as licence effluent limits.
16 Presently, the facility can meet that; that hasn't
17 been a problem for them. They will probably look
18 to more actively managing their wastewater
19 treatment facility, probably disposing of effluent
20 instead of holding it. As long as they know it
21 meets standards, just release that excess water.

22 And with the Memorandum of
23 Understanding that has been signed off between the
24 Village and Parks, there is some comfort that the
25 Village does have a partner should the facility
26 need to be upgraded and revised to -- the design
27 revised to meet those effluent limits.

28 Part D, clause 25, a

1 suggestion, here, for monitoring station HJ-1A, the
2 water supply for warm well number 4... changing
3 that to new well number 5. Number 4 is currently
4 out of service; we don't expect to be utilizing
5 that well in the future.

6 Physical monitoring, clause
7 30... a comment on that. We'd just like to direct
8 the Board's attention to a letter from the Village,
9 April 10th, 2001, which provided a response back to
10 DIAND's intervention, regarding the annual
11 inspection of the facility by a professional
12 engineer. We'd still like to reiterate that the
13 Village staff, public works staff, who are licensed
14 municipal operators, routinely inspect this
15 facility, at least on a weekly basis. And they're
16 out there, you know, insuring that things are
17 operating fine, and berms are stable, there are no
18 problems in the area.

19 We think it's more realistic,
20 from a public works standpoint, to recognize that
21 that facility is being inspected by public works
22 staff. And, should something be noted, contrary to
23 the facility and its design and its performance,
24 that, then, is the point to bring in a professional
25 engineer to do an annual inspection.

26 So, our suggestion, here, is to
27 recognize the weekly physical inspections the
28 Village currently undertakes, and the reporting of

1 those inspections and, if there are problems noted
2 with the performance of the facility, then that's
3 the time that the Village would engage a
4 professional engineer to inspect the facility and
5 provide its recommendations for remediation.

6 And those are the comments that
7 we have on the draft licence. We have, maybe, a
8 final comment here from Mayor Farynowski.

9 MR. FARYNOWSKI: Just briefly, to summarize, we
10 feel the importance of number 5 well. As Dan
11 referred to earlier, even now, when we have a
12 problem with the existing -- we're operating on one
13 well and, even though -- even if the aquifer wasn't
14 depleted, when we have a maintenance problem, or
15 the well -- the pump quit, we only have about a
16 safe capacity, in our water tower, in order to
17 provide good fire prevention, of about eight hours.
18 So we have to get that well switched over and
19 changed, and we do need a second well as a backup
20 water supply. And number 4 is just not useable.

21 So we want to at least get a
22 test well drilled, a smaller diameter, to make sure
23 that there is a good water supply in the number 5
24 area, this year, and then, if there was an
25 emergency, we could create the bigger well and get
26 it on line.

27 The second concern that we have
28 is, because of the process and the time-consuming,

1 and the cost to us, as a village, this has been
2 rather more expensive than in the past. I don't
3 know, I guess you're all familiar, that the
4 Territorial Government used to take care of all
5 these costs, and now we have to bear the cost. And
6 we work on a very small tax base. So we really
7 would like to see a 20-year licence, so we don't
8 have to do this too soon, again.

9 And we also have a very good
10 relationship with Parks; we are a very concerned
11 community, about the environment. And the park is
12 our home, and we all want to live there. And this
13 letter of agreement, or the Memorandum of Agreement
14 we have with the park, I think, gives us protection
15 against any big financial costs or anything else,
16 should there be a boom in population. Although,
17 it's quite unlikely that you're going to get Haines
18 Junction going to 20,000 people. And if it did
19 exceed what we've estimated in our licence request,
20 then we would have to be coming back for an amended
21 licence anyway.

22 So we don't feel that 20 years
23 is an unreasonable request. And we will continue
24 to, as we have, work with the park. And any time
25 there was discharge, if it's required, it will be
26 monitored by us, Parks and anyone else that has to
27 be involved. If we had to discharge, we can do it
28 on smaller quantities, and more often, than one big

1 quantity. And there are many ways I think we can
2 deal with the situation and still maintain the
3 levels that we've agreed to.

4 The last item is having to --
5 that Dan just related to -- having to have a
6 professional engineer inspect the lagoon site on a
7 yearly basis, we feel is, again, putting an
8 unnecessary financial burden on the Village, when
9 we do inspect it regularly on our own. And if
10 there was any sort of structural problem, we would
11 quickly be calling an engineer to the site to deal
12 with it.

13 A year is a long time, and a
14 lot of things can happen a week after the inspector
15 was there. So I think our inspections are more
16 critical than any engineering on a year -- with a
17 year apart.

18 So that's all I wanted to say
19 at this time. Thank you very much.

20 MR. CORNETT: I think that concludes the
21 Village's presentation.

22 MR. GRAINGER: Thank you, Mr. Cornett, Mr.
23 Boehmer and Mr. Farynowski. Just thinking, maybe
24 before we get into questions, if we want to take
25 just a quick 10 minute break, collect our thoughts,
26 and then entertain questions from other
27 participants.

28 MR. ENNS: Mr. Chair, I just wonder if I

1 can ask one question for clarification, before we
2 break? It's very quick.

3 I don't have a copy in front of
4 me, but there was some guidance sent out by the
5 Board, as it relates to this two-phased approach to
6 licensing, which would involve a draft licence
7 being issued at some point in the process. And I
8 guess the question is, I thought that that guidance
9 -- my recollection was that that guidance said that
10 we would be reviewing draft licences for things
11 like errors or omissions; and that we were not
12 going to be allowed to argue about the substance of
13 the draft licence.

14 Is this an exception to that;
15 or have I completely, you know, misrecalled the
16 advice that the Board had provided?

17 MR. GRAINGER: Just one second.

18 Mr. Enns, just to answer your
19 question, this is an exception, in that the
20 original proposed procedure was to hold a hearing,
21 and then produce a draft licence -- or, adjourn the
22 hearing, come up with a draft licence, and then
23 conclude a second stage of the hearing. So this is
24 a little different. I don't know if that answers
25 your question.

26 MR. ENNS: It does, thanks.

27 MR. GRAINGER: Okay, with that, then, we'll
28 take a 10 minute break.

1 (Proceedings adjourned)

2 (Proceedings reconvened)

3 MR. GRAINGER: We'll continue with questions,
4 from interested parties and intervenors, to the
5 applicant. We'll go in this order: Yukon
6 Government, Environmental Health; DIAND with Parks
7 Canada; Environment Canada; Board members and our
8 technical consultants. So, Ms. Richards, do you
9 have any questions of the applicant?

10 MS. RICHARDS: Not at this time, thank you.

11 MR. GRAINGER: Mr. Sherstone, from DIAND and
12 Parks Canada?

13 **VILLAGE OF HAINES JUNCTION QUESTIONED BY DIAND/PARKS**
14 **CANADA**

15 MR. SHERSTONE: Thank you, Mr. Chairman. Just
16 one question for point of clarification. Mr.
17 Cornett, in your discussion of the draft licence,
18 you referred to clause 23... indicated it wasn't
19 necessary but no problem with it. Are you asking
20 that this clause be removed from the licence?
21 That's the one about the connection with the
22 Dezadeash River.

23 MR. CORNETT: Well, there is a question as to
24 whether or not this was actually necessary. It was
25 recommended in the CEAA screening. It's more food
26 for fodder here, as to whether or not it is
27 required. We're not recommending, one way or

1 another. It's a comment for the Board's
2 consideration.

3 MR. SHERSTONE: Do you have a preference, Dan?

4 MR. CORNETT: I mean, there is some
5 consideration that it is not necessary. If you
6 have effluent quality standards at the point of
7 control of the facility, then why are we concerned
8 with what's downstream in the Dezadeash River? I
9 mean, in that way, it's a redundant clause, and
10 would not be necessary.

11 MR. SHERSTONE: Thank you, Mr. Chairman, I just
12 wanted to ascertain if they had a strong position.
13 We'll address that in our submission to the Board a
14 little later. We have no other questions, thank
15 you.

16 MR. GRAINGER: Thank you, Mr. Sherstone. Any
17 questions from Environment Canada... Mr. Enns?

18 MR. ENNS: Yes, I have a question.

19 **VILLAGE OF HAINES JUNCTION QUESTIONED BY ENVIRONMENT**
20 **CANADA**

21 MR. ENNS: It's my understanding that,
22 under clause 4, that the new well, that's being
23 contemplated, could actually be captured under that
24 clause. In other words, that you'd be able to put
25 in well number 5 if it has a capacity not exceeding
26 the amount stipulated in the regulation. That
27 you'd be able to put well number 5 in, without

1 having to apply for an amendment later. Is that
2 your understanding as well?

3 MR. CORNETT: You might want to direct your
4 question to Water Resources in that matter. I
5 mean, they are the regulator. I can give you my
6 opinion on it.

7 We've not seen this particular
8 clause in any licence before. It is something new.
9 My understanding, it's directly out of the water
10 regulations, and it follows the criteria stipulated
11 for use without a -- use of water/deposit of waste
12 without a licence, and the criteria in which you
13 can utilize that. So, if we read this as a
14 conditional licence, it would imply that, as an
15 example, if you use less than a hundred cubic
16 metres of water per day, you may not need to have
17 that new source licensed.

18 But, again, I'm not the one
19 interpreting the regulations or the licence.

20 MR. ENNS: Thank you. No further
21 questions.

22 MR. GRAINGER: Thank you, Mr. Enns. I'll
23 entertain questions from Board members. And the
24 way I'll do this, is start on my right hand side,
25 go through to the left; and I'll ask my questions
26 last, from the Board members, and then we'll get
27 Mr. Lorimer to ask questions on behalf of the
28 Board, as well, at the end. So, Mr. Johnson, any

1 questions?

2 **VILLAGE OF HAINES JUNCTION QUESTIONED BY THE BOARD**

3 MR. JOHNSON: Two questions. The first one
4 is addressed probably to Jeff Boehmer. Is it
5 reasonable to, or are you expecting to, access a
6 different aquifer with well number 5?

7 MR. BOEHMER: It is definitely our intention
8 to access a different aquifer. That was the
9 experience we had with well number 4, and we'd like
10 to do that. We're hopeful that we'll access
11 another aquifer, given the distance away from the
12 other wells, and our experience in drilling wells
13 in the Village of Haines Junction.

14 MR. JOHNSON: And my second question to the
15 Village... in the presentation, there were a lot of
16 annual average consumption of water, and annual
17 average effluent volumes. Are there any issues
18 with seasonal volumes, based on a tourism season?
19 Have you seen that? Do you have problems, in the
20 summer, that average out over the whole year, and
21 aren't such a big issue?

22 MR. FARYNOWSKI: No, we don't see tourism as
23 taking -- it explains part of our difference, big
24 difference, between the water pumped and the -- the
25 water coming out of the wells, versus the water
26 going into the lagoon system; that, and the water
27 that's trucked out to the peripheral areas, is what

1 we feel is the loss.

2 MR. JOHNSON: No more questions.

3 MR. GRAINGER: Thank you, Mike. Oliver?

4 MR. JIM: My question is to the Village
5 of Haines Junction. Have you ever taken
6 consideration into the possible impacts of a gas
7 pipeline; and if the number of migrant workers
8 coming into a community, what impact will this have
9 on a sewer and water system; and if there's some
10 plan in place, or a new feature or --

11 MR. FARYNOWSKI: We've had a number of meetings,
12 two meetings, with Foothills Pipelines, and we
13 don't feel the impact of the pipeline would be very
14 significant on the community, itself, aside from
15 the construction stage. And that will, in all
16 likelihood, be a construction camp that's not
17 hooked to our facilities. The reason being is, our
18 Official Community Plan doesn't allow for that kind
19 of fast expansion.

20 The end result of the pipeline
21 would be, at maximum, five or six employees, so the
22 population would be in line with the growth we've
23 had so far. But the construction phase, in all
24 indications, there would be a camp located not in
25 the community, and so there would be some effect,
26 maybe, because the businesses would be using a
27 little more water, but we don't see ever exceeding
28 the quantities we've asked for in the licence.

- 1 MR. JIM: Thank you, no further questions.
- 2 MR. GRAINGER: Dianna?
- 3 MS. RAKETTI: I'd like to direct this
4 question to Mayor Farynowski. You mentioned that
5 you had licensed municipal public works staff.
6 Could you expand on what type of training they
7 have?
- 8 MR. FARYNOWSKI: I couldn't give you details of
9 their training courses, although they have
10 everything that's required under the present Yukon
11 Territorial regulations. We have two employees
12 that are -- or, three, actually, that are trained
13 to take the water samples, and also be able to know
14 how to do this process properly. I can't tell you
15 what they have covered. Maybe Dan can, he knows,
16 better, what the courses covered.
- 17 MR. CORNETT: My understanding is that the
18 course that the public works staff has taken is
19 through the B.C. Ministry. It's, I guess, an
20 approved Ministry of Environment course for
21 wastewater treatment systems. It's a
22 practitioners' course. I think it's one week of
23 training, and they go through water and wastewater
24 systems, and how to operate them, inspect them and
25 those sorts of things. And they actually come out
26 with a -- as a licensed operator. So it's a course
27 that the staff have actually taken, outside of the
28 territory, for that. And, presently, there isn't

1 any -- I don't think, under Yukon legislation, any
2 requirement for that, but it is something that the
3 Village has undertaken.

4 MS. RAKETTI: Thank you.

5 MR. GRAINGER: Bruce?

6 MR. CHAMBERS: I have no questions at this
7 time.

8 MR. GRAINGER: I guess it's my turn. On the
9 water supply, current water supply - I guess this
10 is directed to Mr. Cornett - well number 3, the
11 current one in use, I just want to make sure I have
12 my numbers right, 364,000 cubic metres a year
13 capacity; is that correct?

14 MR. CORNETT: Actually, on our slide 18, Mr.
15 Boehmer presented, well number 3 supplies roughly
16 100,000 cubic metres per year, based on
17 hygeological reports on that. So the 330 cubic
18 metres per day, that the Village was using, was
19 from both wells 3 and 4. And that well number 3,
20 now, is basically making up that demand.

21 MR. GRAINGER: I guess what I'm concerned
22 about is the hundred thousand cubic metre -- is it
23 per year, shortfall?

24 MR. CORNETT: A hundred and forty-three.

25 MR. GRAINGER: In one of your slides, you
26 indicated that the current long term demand is
27 243,583 cubic metres a year. Well number 3 is
28 estimated to yield only 100,000 cubic metres per

1 year, of water. Which leaves you a shortfall of
2 143,583 cubic metres a year. That seems like a
3 significant shortfall. How are you doing it; how
4 are you managing to get through the day, let alone
5 through the year?

6 MR. BOEHMER: The numbers that I presented
7 relate to the water licence application with the
8 number, per capita use per day, of -- I think it
9 was six sixty-seven cubic metres per day. Those
10 numbers are compared to the long term use; the
11 ultimate use. Right now, well number 3, we've
12 proved that the long term sustainable yield of it
13 is 100,000 cubic metres per year. I think the
14 Village, right now, is not at that two forty-three
15 thousand cubic metres per year. They are
16 certainly, I think, hovering above the hundred
17 thousand cubic metres per year, right now.

18 So we are expecting a drawdown
19 on well number 3, and that's why we're moving
20 forward on well number 5. But we're certainly not
21 at the two forty-three thousand cubic metres per
22 year.

23 MR. FARYNOWSKI: And just to add, before number
24 4 went into production, we were having a drawdown
25 of the aquifer in number 3. And then, once we had
26 number 4 in production, even though it wasn't
27 producing -- it was only producing -- it ever only
28 produced half of what it was designed for, it put

1 enough -- it got number 4 down to pump -- or,
2 number 3, to pumping a hundred thousand cubic
3 metres a year. And at that rate, the aquifer
4 replenished itself.

5 So, right now, we are taking
6 more than the hundred thousand off number 3 again,
7 and that's why we are concerned about getting
8 another well into production.

9 But, in this slide, the long
10 term -- the total of two forty-three was sort of
11 anticipating population growth and looking 20 years
12 down the road.

13 MR. GRAINGER: Thank you for that. So the
14 information is that, presently, you are just over a
15 hundred thousand cubic metres a year, in total
16 water consumption. And that well number 3 can keep
17 up with it, but you've got to do something?

18 MR. FARYNOWSKI: Yes.

19 MR. GRAINGER: That leads me to my next
20 question, then. When do you expect to drill this
21 exploratory well; sometime this summer?

22 MR. FARYNOWSKI: Yes, we would hope to drill
23 that exploratory well within the next couple of
24 months, just a six inch well, and pump it to make
25 sure that we have a supply there and a good
26 aquifer. And then we've applied for some federal
27 infrastructure funding, to develop the big well if
28 the first one proves productive. Because we're

1 looking at about \$25,000 to drill the test well
2 but, when we go into the big production well, we're
3 looking at about \$200,000. So there's a big
4 difference in costs.

5 MR. GRAINGER: Thank you. I'll move on to the
6 sewage treatment facility, if I can. Mr. Cornett,
7 I just wonder if you can clarify for us, or just
8 make it a little simpler in my mind, as to
9 capacities, design capacities, versus present
10 population and flows, and your 20-year design
11 population. You expressed the numbers in litres
12 per capita per day, but I wonder if you could --
13 or, have you got information that you can tell
14 us... the original associated facility design
15 capacity, with a once per year discharge, how many
16 cubic metres per year is that? Do you have that
17 easily for us?

18 What I'm trying to get at here
19 is, the facility was designed for a once per year
20 discharge, with a certain population sewage
21 generation per capita value, equals a total number
22 of cubic metres per year. I'd like to know what
23 that number is, compared to where you are now; and
24 where you'd be at your design population.

25 MR. CORNETT: I'll break this down into a
26 couple of manageable chunks. In terms of total
27 lagoon storage capacity, the facility provides
28 306,000 cubic metres storage. And that was based

1 on -- that's the original design, based on a once a
2 year discharge. So that's the, shall we say, the
3 gross total capacity of the system and, you know,
4 allowing for, shall we say, dead space. There
5 would be some loss to what you're actually
6 discharging.

7 Cell number 3 has a capacity of
8 100,000 cubic metres. And that's typically what
9 would be discharged in an annual year, if that was
10 at full capacity. So you can say, I guess in terms
11 of rough numbers, what the design capacity was, was
12 100,000 cubic metres of -- less dead storage -- of
13 discharge from that cell number 3.

14 Translating that into what the,
15 shall we say, the design total volumes here, what
16 we're presently using, in terms of annual
17 wastewater production, is 86,000 cubic metres per
18 year. And at that present volume, the system has
19 never discharged, since 1992. So evaporated
20 losses, exfiltration... I mean, the system is
21 losing that volume, that's coming up every year,
22 and we haven't had the requirement to discharge.

23 What's predicted for the 20-
24 year horizon, for annual wastewater production,
25 would be 170,000 cubic metres per year.

26 MR. GRAINGER: Okay, thank you for that. I
27 don't have any other questions at this time.
28 Leigh... anything from you? Okay. Bob Lorimer?

1 MR. LORIMER: I have a number of questions,
2 which I'll direct generally to the Village, and
3 leave it up to you to decide who's most appropriate
4 to answer them.

5 In the application, Exhibit
6 1.2, which is the application, and I guess, more
7 specifically, on page 11, you indicate that the
8 current water usage is 413 litres per capita day.
9 And you covered that in your Power Point
10 presentation as well.

11 Also in the Power Point
12 presentation, you indicated that the original
13 design parameters, which were, I believe,
14 established by Associated Engineering, talked about
15 per capita usages ranging from between 637 litres
16 per capita day, to 728 litres per capita day.

17 So, as you pointed out, your
18 current usage is significantly less than the
19 original design and, in fact, in recent years,
20 you've found a further reduction in water
21 consumption.

22 Nevertheless, given the 413
23 that you have currently, your application requests
24 a water usage based on 450 litres per capita day.
25 Can you explain why, given the 413 that you
26 currently have, and the fact that you're
27 experiencing a reduction in water usage, that you
28 have, in fact, requested a usage which is more than

1 that, that you currently have?

2 MR. FARYNOWSKI: Dan will get into more... we
3 felt necessary to be on the high side, rather than
4 the low side, for the water licence. But, if
5 anything else, based on some of the other
6 questions, if we get, say, a pipeline camp or
7 something else, that it will have some impact,
8 because of maybe hotels and facilities using more.
9 We're hoping, yes, to reduce it
10 more, because we have a program, now, to eliminate
11 all the bleeders, and replace them with thaw lines
12 or circulating systems, and investigate for some
13 further leaks.

14 I'll let Dan brief you more on
15 the licence part, itself.

16 MR. CORNETT: You're quite correct in the
17 numbers here, that we pulled out of the
18 application, page 11. I mean, in putting together
19 an estimate for predicted water use for a 20-year
20 horizon, and that was really the intent here -- if
21 we're going to ask for a water use licence for a
22 20-year period, then we're going to have to come up
23 with some idea of what that water use is going to
24 be. And, of course, that then sets the licence
25 quantity that we're going to apply for.

26 So we had looked at the UMA
27 1988 study, which had a per capita day water demand
28 usage of 584 litres per day, based on, you know, a

1 population of 505. The current demand was looked
2 at over -- from the present situation, 413, and
3 then back, reviewing the present 10-year water
4 demand, which you can see in the application. And
5 then coming up with a recognition of the trend that
6 we'd seen, in decreased water use, but recognizing
7 with increased population for that use, had
8 selected a per capita litre per day water use of
9 450 for that 1500 population. And it was a range
10 within something that's measured, known, and what
11 was predicted from previous studies. So some sky
12 reaching, but with some thought to it.

13 MR. LORIMER: A follow-up to that, then. Mr.
14 Farynowski, you mentioned some steps that you're
15 taking in terms of water reduction. You didn't use
16 the term, but does that constitute a -- is it a
17 water reduction -- water usage reduction program
18 that you're undertaking with those steps?

19 MR. FARYNOWSKI: Yes, it is. We've found, over
20 the last three years, we've been -- sometimes, it's
21 hard to find how many bleeders there are in town,
22 especially when you don't have meters. But just
23 from talking to the people in the plumbing business
24 and that, is how we found out. And I think we had
25 37 bleeders, three years ago; we're down to 17 or
26 16 now. We're hoping to eliminate those all, by
27 the end of the summer. It's just some of the old
28 systems, when the system was first put in, bleeders

1 were a pretty common thing, as they are and were in
2 Whitehorse. And we're hoping to get rid of all of
3 those.

4 We've also found that some of
5 the lots, that have been consolidated into one --
6 we have a subdivision with very small lots, and a
7 lot of people bought two and they use one service.
8 And when the contractor installed the systems, he
9 had the valve opened on the main, and shut off at
10 the curbside, and some of those had popped because
11 of frost and no flows, and we had some open lines
12 underground. And we think we've got all of those
13 now.

14 And what we're going to do with
15 this program, hopefully this summer, is go to any
16 lot that has been consolidated, where there's an
17 unused service, and dig it at the main, to make
18 sure it's shut off and we're not losing water
19 there.

20 MR. LORIMER: What is your target water
21 consumption, under that reduction program?

22 MR. FARYNOWSKI: We don't have a target value
23 set. Our concern is just to stop wasting water.
24 We haven't done the research to see exactly what it
25 would do.

26 MR. LORIMER: But presumably something less
27 than 413?

28 MR. FARYNOWSKI: Yes, theoretically, it would be

1 something less than that.

2 MR. LORIMER: Also, in your application,
3 Exhibit 1.2, table 1, which I guess is on page 8 of
4 that exhibit, you have a table which shows water
5 consumption and wastewater production for the years
6 1990 to '98. Ignoring the two or three years in
7 which there are gaps in the data, I believe taking
8 those out leaves us six years of record, '93 to
9 '98.

10 In your presentation, you
11 talked about a figure of 72% representing the
12 amount of consumed water which finds its way to the
13 wastewater facility. So, in other words, the water
14 that's taken from your wells, and then used, 72% of
15 that finds its way to the wastewater treatment
16 facility.

17 If you look at the numbers in
18 table in your application, in fact, the percentage
19 varies from as low as 63% to as high as 80%. Can
20 you provide an explanation of why that variation
21 exists?

22 MR. FARYNOWSKI: I think, a lot of it, because
23 it's a small community, and one big user could have
24 an impact on it; i.e., if you have a dry summer and
25 the school waters their lawn all summer, it would
26 have a big impact on that return. Plus the fact
27 that, some of where we've had a water main break,
28 and it leaked a lot, that would never go into the

1 lagoon system. And we've had a couple of those,
2 that I can remember in the last four or five years,
3 that were in the main line coming out of the
4 pumphouse. And it happens in the middle of the
5 night and, before it's shut off, there is a lot of
6 water gone.

7 But I know the school, for
8 instance, it's under my administration, is a very
9 high user of water, and it's metered, if it's a dry
10 summer and there is a lot of sprinkling.

11 MR. LORIMER: So a follow-up to that, then,
12 is, you've used a figure, an average figure, of
13 72%, in your calculations. Based on the historic
14 record, is it possible it could be as high as 80,
15 or could it be higher than that? How comfortable
16 are you with the 72%?

17 MR. FARYNOWSKI: That figure was more for
18 information. But I think fairly comfortable,
19 because the trend, the newer developments that are
20 taking place, people are putting lawns in, instead
21 of just a gravel front yard. So I think, if
22 anything, it's not going to go as high as 80; it'll
23 hang around the 72 or maybe a little less.

24 MR. LORIMER: It's a bit more than just
25 information, because it influences how much water,
26 how much wastewater, finds its way to the
27 wastewater treatment facility; and, ultimately,
28 what that flow is going to be at any point in the

1 future, in terms of population.

2 Turning to the water supply
3 wells... you've mentioned that water well number 4
4 is currently out of service. And, obviously, the
5 significance of that, primarily, is that water's
6 not available. Are there any other implications;
7 are there any other impacts of that well being out
8 of service? Does it impact, for example, the usage
9 of the reservoirs that are built into the system?
10 Are there any other implications of that well being
11 out of service?

12 MR. FARYNOWSKI: No, number 4 being out of
13 service doesn't have any impact, other than number
14 3 has to pump more water. And that pump is almost
15 -- it's only an eight inch or ten inch well, and
16 it's almost pumping at capacity with a 20
17 horsepower pump. And it is lowering the aquifer in
18 number 3. Otherwise, there are no impacts on the
19 reservoir.

20 The drawdown in the reservoir,
21 during the day, is a little more than it used to be
22 with both wells operating, but it's still within a
23 safe level for a fire and anything else.

24 MR. LORIMER: In your application, Exhibit
25 1.2, page 10, you have a table showing water
26 consumption, wastewater production. According to
27 that table, your current water usage, "current"
28 meaning 1999, is approximately 120,000 cubic metres

1 per year. The information that you've presented in
2 your Power Point presentation, earlier, indicated
3 that well number 3 is capable of producing 100,000
4 cubic metres per year. Which would imply a
5 shortfall of 20,000 cubic metres per year,
6 currently.

7 Where is that 20,000 cubic
8 metres coming from now?

9 MR. FARYNOWSKI: That 20,000 cubic metres is
10 coming out of well number 3. When we lost number
11 4, we put a bigger pump in it, and we're taking it
12 out of number 3.

13 The recommended level, for
14 number 3, was 100,000 cubic metres maximum. When
15 we pump more than that, it seems to be lowering the
16 water level in the well slowly, month to month.
17 Whereas, when we pump it at 100,000 or less, the
18 water level remains constant. And that was the
19 reason we went to number 4 in the first place,
20 because number 3 was going down slowly. And then,
21 after we started pumping 100,000 or less, the water
22 level came back to what it was when the well was
23 drilled. In other words, the aquifer replenished
24 itself.

25 MR. LORIMER: Can you tell us specifically
26 what impact that's been over this period of time;
27 how much has that water level dropped, since you've
28 started doing that?

1 MR. FARYNOWSKI: Not significantly, since it's
2 only started in November of 2000. Although, when
3 number 4 was pumping every once in awhile, the
4 winter before, say, previously, number 3 well
5 actually became artesian for awhile, and it had
6 done that. Right now, the water level's down at
7 about 70 feet, in a well that's 200 and some feet
8 deep. But when it was pumping at number 4, it was
9 holding at about 38 feet from the surface.

10 MR. LORIMER: So, given that, what's your
11 projection of the sustainability of what you're
12 currently doing? How long can you continue to do
13 what you're doing now?

14 MR. FARYNOWSKI: I believe our hydrological
15 consultant had looked at number 3, when number 4
16 was being planned, and said, if we kept doing this,
17 probably 10 years we might have problems with
18 number 3.

19 MR. LORIMER: You indicated, also, in the
20 presentation, that well number 1 was, from a water
21 quality point of view, acceptable quality. The
22 problem that you encountered with well number 1 was
23 temperature; because of the proximity to the river,
24 it tended to be a cold water well, and then was
25 prone to freeze-up.

26 Is well number 1 still
27 available as a supplementary well, for your system?
28 Is there anything to prevent you from withdrawing

1 water from well number 1, and mixing it with warmer
2 water from well number 3?

3 MR. FARYNOWSKI: Well number 1 had problems with
4 silt, even when it was operating. It's still
5 useable, and we see it as an emergency only.
6 Because the water is much harder, as well, and even
7 though it met all the -- for quality standards, it
8 was okay, but there was complaints from the people
9 when well number 1 was being used, because it's a
10 shallow aquifer that's coming right from the river.
11 And it's only a six inch diameter well, so it's
12 really a residential well.

13 MR. LORIMER: Do you have any current
14 information on how much water you could dependably
15 withdraw from well number 1?

16 MR. FARYNOWSKI: From pumping it from before, I
17 believe it would be less than a quarter of what
18 number 3 can produce easily. Jeff can give you
19 some numbers on it.

20 Well number 1 could produce 7.4
21 litres per second, or 100 imperial gallons per
22 minute.

23 MR. LORIMER: Is anybody fast enough to
24 convert that into an annual rate?

25 MR. BOEHMER: That works out to 243,000 cubic
26 metres per year, just doing the quick calculation,
27 Bob. So it's got the capacity; the problem is,
28 it's the water quality, temperature and the silt.

1 And the concern about it being hydraulically
2 connected to the Dezadeash is always a concern.
3 And it's there, I suppose they could use it. But
4 the idea is to get a more secure, safe, source.

5 MR. LORIMER: Thank you. You mentioned, and
6 this was questioned by one of the Board members,
7 the licensing of the operators. I believe your
8 answer was that they received training through a
9 program in B.C., a little bit vague about what that
10 is. You did say they were licensed.

11 So, do they actually have some
12 sort of an actual document, a licence, that comes
13 from that; and if so, what is that licence?

14 MR. CORNETT: This is based on my
15 conversation with Martin Jones, who's a Supervisor
16 of Public Works. I mean, he advised me that he had
17 gone out and taken a course, and he actually has
18 come back as a licensed operator. Now, I didn't
19 see his licence, but I guess we can ask to have
20 that produced.

21 MR. LORIMER: Is that licence a requirement
22 of the job description for those positions?

23 MR. FARYNOWSKI: No, it isn't, right now. It's
24 the former, two council's back, the first year I
25 was on, it was something that the council decided
26 they should do. It wasn't something that we had to
27 do. But we just felt that it would be beneficial
28 to all parties, including the operators and the

1 residents, just to feel more comfortable.

2 MR. LORIMER: So is it fair to say it's
3 optional, rather than mandated, then, as part of
4 the job?

5 MR. FARYNOWSKI: That's correct.

6 MR. LORIMER: Just following up on the
7 licence issue... is it your understanding that it's
8 a licence, or a certificate?

9 MR. FARYNOWSKI: I believe it's a certificate.

10 MR. LORIMER: Do you know what training the
11 operators receive under that program, in terms of
12 facility inspections? I guess, specifically, you
13 mentioned, in your presentation, Mr. Farynowski,
14 that you believe that those operators, given their
15 training, were as qualified, to carry out the
16 inspections of the facilities that were described
17 in the draft licence, as being carried out by a
18 professional engineer on an annual basis. So, can
19 you tell me what training they receive as part of
20 this program, that gives them those qualifications,
21 that training, to carry out that type of inspection
22 and this type of facility?

23 MR. FARYNOWSKI: The training is -- what they're
24 training, what I was told by them, was that they
25 were told to inspect the dykes and look for any
26 kind of hairline cracking or any deterioration of
27 the dyke, at all, that could show something was
28 happening. And I know, personally, I have a

1 background in geotechnical, and I've walked over
2 the areas with them and, without saying anything,
3 I've noticed that they've picked up things. So I
4 feel that, as far as doing the inspections once a
5 week, and walking around it and having a good look,
6 that they are thorough.

7 Again, as I said, if there was
8 anything indicated, that there was any sort of
9 crack or any signs of distress, they're told to
10 immediately notify the office, and then a
11 consultant would be called in to look at it. And
12 what I was trying to emphasize, a consultant
13 inspection, a year apart, there's a lot can happen
14 in that year in between, and I felt our inspections
15 were doing more than having to have a scheduled
16 yearly check of it.

17 MR. LORIMER: Turning to effluent quality, in
18 the Power Point presentation, there was a slide
19 which showed the effluent quality standards that I
20 believe were the design parameters established by
21 Associated Engineering at the time the sewage
22 treatment facility was designed. I guess, first of
23 all, is that correct; is that what that slide
24 shows?

25 MR. CORNETT: Yes, that is correct. They're
26 taken as the recommended criteria out of the --
27 directly from the 1980 AESL report.

28 MR. LORIMER: Thank you. Can you tell me

1 what the term "maximum grab" means? There's a
2 column that says "maximum grab"; can you tell me
3 what that means?

4 MR. CORNETT: Well, I've lifted directly from
5 the report. What it meant was a grab sample,
6 maximum concentration -- not to exceed that
7 concentration.

8 MR. LORIMER: At any time of the year, during
9 summer months... do you have any information to
10 tell us when that was?

11 MR. CORNETT: Well, these were for a
12 discharge requirement, for a once a year discharge
13 from a sewage treatment facility. So a grab
14 sample, collected from that facility during
15 discharge, was to meet those effluent criteria. In
16 other words, there wasn't a requirement for
17 composite sampling or any of that monitoring. What
18 was in the report was, collect a sample during
19 discharge, and here's the maximum concentration
20 that, you know, they expected the facility to meet.

21 MR. LORIMER: And then, following to the next
22 column, where it says "monthly average", then that
23 would be over the discharge period?

24 MR. CORNETT: Correct, that was my
25 understanding.

26 MR. LORIMER: The effluent quality standards,
27 that are in that table, vary somewhat from the
28 standards that were in the previous licence which

1 has expired. I don't have the number just offhand,
2 but the previous licence. It's actually in the
3 draft licence, exhibit 10.1, on page 5. In
4 particular, the B.O.D. in the previous licence was
5 45 milligrams per litre, versus 65, as the design
6 criteria; suspended solids is 60, versus 65, in the
7 design criteria; and faecal coliforms, 20,000 per
8 hundred millilitres, in the previous licence,
9 compared to 200,000 in the design criteria.

10 Do you have any comments about
11 those differences, between what the design criteria
12 were and what was in the previous licence?

13 MR. CORNETT: I think the comment, here, was
14 that the range of concentrations, for the
15 parameters that were in the expired licence, were,
16 shall we say, generally within the maximum grab and
17 monthly averages that were in the AESL report for
18 the original design criteria for the facility.
19 Where they actually stem from... I don't know,
20 there was no particular allusion to that in the
21 reasons for decision, or in the previous
22 application. I think they were carried forward
23 from the actual original water use licence, and
24 what was the first facility licence for that
25 lagoon, and basically those numbers have carried
26 forward.

27 MR. LORIMER: Thank you. I have some
28 questions regarding flows and capacities, and I am

1 a little bit confused about some numbers, so I just
2 want you to lead me through, or I'll go through
3 some numbers, and just make sure that my
4 understanding is clear. In your application,
5 Exhibit 1.2, page 11, you indicate that the
6 wastewater production, for 1483 people, in other
7 words year 2020, is estimated to be 175,000 cubic
8 metres per year. Based on my calculations, from
9 the numbers you've presented, that would represent,
10 I believe, about 56% of the original design
11 capacity of that facility. Am I correct in that?

12 MR. CORNETT: If you're using the total
13 sewage capacity of approximately 310,000 cubic
14 metres, and what that production is, it sounds
15 about right. I haven't calculated it.

16 MR. LORIMER: And that would be the capacity
17 of the three aerobic cells? That would be the
18 total capacity, correct?

19 MR. CORNETT: That's the total capacity of
20 the whole system, combined. The capacity for cell
21 number 3 is roughly 100,000 cubic metres.

22 MR. LORIMER: And currently, the wastewater
23 production is at about 311,000 cubic metres per
24 year, according to your application. So you're
25 currently at about 28% of that total capacity.

26 MR. CORNETT: Would you repeat that? The
27 number I'm using here, from table 2, for annual
28 wastewater production, would be approximately

1 86,000 cubic metres.

2 MR. LORIMER: Yes, I'm sorry. Yes. Three-
3 ten is the total capacity. I misspoke myself, my
4 apologies. Three-ten is the total; the current is
5 86,000. So you're currently at about, by my
6 calculations, about 28% of total capacity -- or,
7 design capacity, and, according to your numbers, at
8 2020, you would be at about 56%.

9 MR. CORNETT: That appears to be correct.

10 MR. LORIMER: Given that, you mentioned that
11 cell number 3 has a capacity of approximately
12 100,000 cubic metres. And your current production
13 is -- of wastewater, is about 86,000. And yet
14 you're not discharging. You've discharged twice,
15 you said; in 1990 and '92, was the last discharge,
16 so that's nine years ago.

17 You mentioned that cell number
18 3 would presumably, in a continually operating
19 system, discharge each year. So you would
20 anticipate a discharge of about a hundred thousand
21 per year. You're currently putting about 86,000
22 in, but not discharging in nine years. So, it's
23 going somewhere. You mentioned a combination of
24 evaporation and infiltration.

25 But, given that, what's your
26 projection on when your next discharge would be?

27 MR. CORNETT: Actually, I think we are
28 actually going to be discharging shortly, from my

1 understanding here. The level has come up,
2 probably on the basis of recent climatic
3 conditions, and I think the Village is actually
4 looking to carry out a discharge sometime in the
5 future.

6 MR. LORIMER: Do you anticipate that that
7 discharge would be able to meet the effluent
8 quality standards that are shown as proposed in the
9 draft licence?

10 MR. CORNETT: At present, yes. I mean, it
11 hasn't been sampled here, right today, but that
12 effluent has been sitting, or residing, in the pond
13 for a significant period of time. I mean, there
14 have been *in situ* rainbow trout bioassays conducted
15 in the lagoon cell; they've all survived. I mean,
16 there's nothing to indicate that there's any
17 particular problem with the effluent quality. And
18 I mean, it would be sampled beforehand, and
19 notification given, and the effluent released and
20 the testing to follow up, and the reporting to be
21 done afterwards. But, at this point in time,
22 there's nothing to believe that we have a problem
23 with that effluent quality at present.

24 MR. LORIMER: Is it fair to say, then, that
25 the ability of that system to meet what's shown as
26 the proposed effluent standards, in the draft
27 licence, is dependent on long term retention in the

1 lagoons; in other words, long term retention beyond
2 at least one year?

3 MR. CORNETT: Based on present experience
4 with the facility, I mean, there is nothing to
5 indicate that we would have a problem if we were
6 under the sewage design capacity flow rates. And
7 this is something that we've actually discussed
8 with the Village, to, you know, start progressively
9 releasing wastewater; don't wait for nine years.
10 You can actually draw down the facility, and maybe
11 conduct it every couple of years, and you may
12 release a smaller volume. If you know that your
13 quality is fine and meets standards, then do that.
14 Just don't leave yourself in a situation where you
15 leave it too long, your flows increase, and you may
16 run into a particular problem.

17 So the system, we think, in the
18 short term, can be managed to meet those types of
19 effluent limits. The concern was, if, you know,
20 something significant happens in relation to
21 population, and we can't predict the future, but we
22 wanted it on the table that, should the facility
23 design flow capacities be increased to such that
24 you couldn't -- or you had to operate it as it was
25 designed, i.e. once a year discharge, and meet
26 those criteria, that there would be a potential
27 problem. And that's why the issue was raised.

28 But based on the present

1 performance of the system, all indications, as to
2 the amount of evaporative loss or other things that
3 are happening there, we don't have a good hard
4 number on it, it appears that the water is going
5 somewhere, and the system is performing well, so
6 there isn't a real concern with it meeting those
7 numbers at this point in time.

8 But, again, there is a red
9 flag, and certainly that's why the Village had
10 tried to work cooperatively with Parks, to come up
11 with an understanding between them, to have their
12 assistance, should it be required down the road.

13 MR. LORIMER: In your response, you've said
14 that the system could meet this requirement, then,
15 in the short term. "Short term" were your words.
16 What does "short term" mean?

17 MR. CORNETT: Well, probably within a 10 year
18 period. There wasn't anything that's really
19 indicative of having a problem within that time
20 frame. Short term.

21 MR. LORIMER: What would happen beyond 10
22 years?

23 MR. CORNETT: Well, based on the predictions
24 that we've provided for population estimates and
25 per capita water use/wastewater production, for a
26 20 year horizon, we still felt that the facility
27 can meet the design flow criteria, would be under
28 that, and then has a fighting chance of meeting

1 effluent limits on that basis.

2 MR. LORIMER: Now I'm confused. In terms of
3 flow, I understand that part; and the 20 year
4 horizon. Because, in fact, as we talked about a
5 few minutes ago, even at your 20 year flow
6 projection, you're still only at 56% of the design
7 flow for the facility. So I'm clear on that.

8 What I'm not clear about is on
9 the effluent quality. At what point would that
10 facility be not able to meet the standards that are
11 shown in this draft licence as proposed effluent
12 standards? And I think I heard you say, a minute
13 ago, you thought about 10 years.

14 MR. CORNETT: I can't predict that, Bob. I'm
15 just relying on what actually has come out of the
16 original design criteria for the facility; what
17 effluent numbers it was predicted to meet, and what
18 we actually see the present facility performing at.

19 If it's up to design capacity
20 flows, and it has to have a once a year discharge,
21 it appears that you would not meet the federal
22 facility guidelines. As to when that occurs, I
23 can't predict that.

24 MR. LORIMER: In your application, you've
25 asked for a 20-year licence. And if a 20-year
26 licence was granted, with the standards that are
27 shown in the draft licence as proposed, I think
28 what I hear you saying is that, somewhere in that

1 period of time, this facility would be able to meet
2 that requirement. And I guess what I'm trying to
3 find out is, where is that likely to happen? Is
4 that likely to happen in year 5, 10, 15? Because
5 you've asked -- I think you've asked to licence a
6 facility, and the information that you're
7 presenting is that, in fact, it may not be able to
8 meet that requirement at some point in the future.

9 MR. FARYNOWSKI: If we could anticipate what the
10 population growth was, exactly, and how much water
11 people would use, I guess we could answer that
12 specifically. But we feel -- and that was one of
13 the reasons we went to Parks Canada and said we
14 would like to have an agreement with you, that if,
15 half way through the licence, there is a problem in
16 meeting the standard, that we can work together in
17 solving the problem and making sure that the
18 discharge meets the licence requirements. And
19 Parks has basically agreed to that, to help us both
20 with their employees and staff, and professional
21 guidance, as well as getting additional funding if
22 we had to.

23 So, over a 20-year period, we
24 don't intend to discharge anything that doesn't
25 meet that standard. If we get into the situation
26 during that 20 years, which we don't think we will,
27 but if it happened 10 years down the road, we'll
28 correct it before we discharge it.

1 MR. LORIMER: Given your comment about the
2 uncertainty of population growths and flows and
3 water consumption... setting that aside for the
4 moment, then, and looking at the issue from a
5 different side, what frequency of discharge, from
6 the facility, would not meet this proposed
7 standard?

8 In other words, you're
9 currently discharging very infrequently. What
10 frequency of discharge would not comply with that
11 requirement?

12 MR. CORNETT: Well, based on the design
13 criteria, a once a year discharge would probably
14 not meet the requirement, based on the design
15 capabilities and the parameters that were in the
16 AESL report. If we had the more restrictive
17 numbers, then we would not be able to meet those
18 parameters. And, in particular, probably the
19 problem, that's going to be more problematic, is
20 coliforms. To meet that low number, you'd probably
21 have to have some other type of treatment
22 capability; there may be aeration, or... a number
23 of different possibilities have kind of been kicked
24 around. But that would be the parameter that you'd
25 have the most concern with, in trying to meet a
26 number.

27 MR. LORIMER: We've bracketed the issue a
28 little bit here; you've said that once per year

1 would not meet it; you've said that, currently, you
2 would, and that's probably something in the order
3 of eight or nine years, based on the limited
4 experience you have. So, somewhere in between one
5 and nine, or one and eight, there's a break point
6 where, whether it's once every two years or three
7 years or four years, somewhere in there, it would
8 not meet that. Do you have any sense of where that
9 break point is; where that frequency of discharge
10 goes beyond the ability of the facility to meet
11 this requirement -- this proposed requirement?

12 MR. BOEHMER: Bob, I'd like to interject,
13 just to provide a little background, before they
14 answer your question, just for the Water Board's
15 behalf. The original Associated report was done in
16 1980. At that time, it envisioned this system,
17 though it was constructed in '85 and put into
18 operation in '86.

19 That report spoke to the fact
20 that, when the population hit a thousand people,
21 the facility would be doubled up. But, certainly,
22 the Village isn't thinking of doing that right now;
23 and certainly the recommended standards, or what
24 Associated thought the facility could operate at,
25 in '80, the Village has seen improvements in what
26 those numbers are.

27 I understand what you're saying
28 about where is that point where, if we have to

1 discharge once a year, we don't meet it; once every
2 two years, we don't meet it; I understand that
3 point. I think what I'm trying to provide as
4 information is that the Village has been working,
5 quite studiously, to try to find that point; find
6 out, based on the current facility's operations,
7 and how it has exceeded what design was, where
8 we're at with that.

9 I don't know how relevant the
10 '80 report is, because it was a recommendation; it
11 was what was expected. And it's since exceeded
12 those expectations.

13 I just wanted to provide this
14 information anyway. Thank you.

15 MR. FARYNOWSKI: I believe, when our Fisheries
16 guy had the fish in there and there was no problem,
17 that was four years after a discharge, so I think,
18 at that time, it would have met the standard, that
19 it would, today, say seven years. But exactly when
20 it would have, I don't know. We didn't monitor
21 that way, to see whether it was twice as good,
22 after two years, as it was in one, or how it
23 worked.

24 MR. LORIMER: You've asked for a licence for
25 a 20-year duration. There is a proposed effluent
26 quality standard. I'm wondering, is there anything
27 that you can provide, in the way of information,
28 that would help the Board to understand whether or

1 not the facility can meet the proposed effluent
2 quality standard throughout the 20-year projected -
3 - the 20-year requested licence; and if not, at
4 what point would it not be able to meet that? Just
5 to help the Board understand where and what the
6 capability of that facility is, in terms of the
7 length of time that you have asked for a licence,
8 and the standards that have been proposed as
9 effluent quality requirements.

10 MR. FARYNOWSKI: Well, as Dan said earlier,
11 there are ways that we can modify that effluent in
12 the third cell, to make it meet the standards if it
13 didn't. So that's where we've agreed to work with
14 Parks, whether it's aeration or whatever it has to
15 be.

16 Before we discharge, we check
17 the quality. And if it doesn't, then we make sure
18 it meets before we have to discharge. And when we
19 talked, earlier, about discharging a little bit
20 more often, that would give us the time to make
21 those corrections. We don't want to fill it to the
22 top, and we get to where it has to be discharged
23 next month and, now, we find we can't. We want to
24 look at it when it's half full, and say, okay, it
25 meets the standard now, we'll let this out.

26 MR. LORIMER: Those things that you talk
27 about would be, at present, unknown modifications
28 to the facility; whether it's expansion, that Mr.

1 Boehmer talked about a minute ago, or whether it's
2 adding aeration... I mean, those are possibilities,
3 but those are modifications that would have to be
4 put into place. I presume those, and perhaps
5 several others, could be implemented.

6 MR. CORNETT: Certainly. Those types of
7 modifications would actually require a licence
8 amendment to do that. If you went to, you know,
9 spray irrigation, down in the pastures, and
10 irrigated fields, or, you know, put in a
11 constructed wetlands, downgrading the facility, or
12 something like that... I mean, there are a number
13 of options, prior to it breaching Parks, that you
14 could explore. Those things would require a
15 licence amendment to deal with.

16 Some of the things that John
17 has talked about, were talking about more
18 operationally. You can do them right now. You
19 don't have to -- well, if we do them, it would be
20 in line with -- what we're thinking of, that would
21 be in the present licence, would be to operate the
22 facility to -- you know, instead of waiting for
23 nine years or eight years to discharge, start
24 discharging more frequently. And, at that point in
25 time, I think we're going to get a better sense as
26 to how long water can sit there.

27 My gut reaction is that, you
28 know, a couple of years of effluent sitting in

1 those ponds, you probably have a fighting chance of
2 knocking your faecal numbers down, to something
3 that may meet those requirements. Don't know that
4 for sure. But I think the thinking, here, is to
5 say, all right, after two years, let's test what's
6 in the pond. Does it meet the requirement? Okay,
7 yes, let's get rid of it. And start building a bit
8 of a sense for how well that system does perform,
9 and then start gathering some information on that.
10 And it's more of a change of an operational
11 strategy than anything else.

12 They've been able to get away
13 with not having to think about discharging at all.
14 Great; beautiful. That's a wonderful system that
15 way. But, you know, in light of the concerns with
16 downstream and whatnot, there are other operational
17 things that could be done, more on the short term.
18 Every couple of years, look at your facility, do
19 the test work; does it meet the requirements? And
20 if it does, then let's release some water, and
21 allow the facility to do what it's supposed to do,
22 and gain some knowledge as to how well it works
23 that way.

24 So that's sort of the other
25 thing that we were alluding to. It's not so much a
26 go on out and change a whole component, or add
27 something else, or expand the facility; just change
28 some of the operational mentality and thinking into

1 it, to try and maximize the performance, in light
2 of maybe the more restrictive numbers that may be
3 placed on it.

4 MR. LORIMER: Thank you. Could we just take
5 a moment, I'd just like to talk to the Chair for a
6 moment.

7 MR. GRAINGER: Bob's just got a couple more
8 questions, and we're just trying to schedule a
9 lunch break here. But we'll let Bob finish. I've
10 got just a couple of other quick ones, as well.
11 We'll do those, and then break for lunch, if that's
12 all right with everybody. Okay, carry on, Bob.

13 MR. LORIMER: In your presentation, you
14 didn't talk, at all, about the treatment in the
15 wetland area. This was information that was in
16 your application, and in other supporting
17 information. But you did not address that. Can you
18 tell me what your comments are, about the treatment
19 component -- the wetland treatment component, and
20 how it fits into this situation, this scenario?

21 MR. CORNETT: A couple comments on that.
22 One, the Board was pretty specific in what they
23 were looking at for the focus of this hearing;
24 three particular points. So, I mean, we were
25 basically focusing on those points, and not really
26 the whole application, what's going on that way.

27 Another comment, that more or
28 less come out of the environmental screening, there

1 was a, shall we say, concern from Parks Canada, to
2 actually have the wetlands recognized as a wetlands
3 part of the treatment system within the licence.
4 And water flows downhill. It's going to end up in
5 there.

6 To me, the wetlands is going to
7 be used, regardless. The facility is going to end
8 up flowing into that, into the park and into the
9 Dezadeash River. So, I mean, the wetlands is going
10 to be used. Like it or not, formally or not, water
11 is going to end up going in there, if it is
12 discharged.

13 The studies that were
14 undertaken by Klohn Leonoff, in '91-92, would
15 indicate that there may be some renovation
16 occurring but, because of the quality of the
17 effluent that was in the facility, that was sort of
18 inconclusive. I don't know, from our standpoint,
19 we feel that wetlands treatment is a bit of a known
20 technology, that has the capability of renovating
21 effluents and providing a final polishing, and we
22 think that's what will happen down there.

23 So those are a couple of
24 comments. We hadn't really ignored it, but we
25 weren't really focusing on it.

26 MR. LORIMER: Thank you, I have no further
27 questions.

28 MR. GRAINGER: Thank you, Bob. I just have a

1 couple more, and give Board members a last
2 opportunity if they had thought of anything else
3 over the course of Bob's questioning.

4 Just going back to the 175,000
5 cubic metres a year, which is your estimated annual
6 wastewater production. Bob has calculated it
7 represents 56% of the storage, the annual storage
8 capacity in the ponds. Have you done, or plan on
9 doing, any specific engineering or scientific
10 studies on that volume, that flow, that future
11 flow, to predict its effluent quality, in
12 comparison to these more stringent proposed
13 standards?

14 MR. CORNETT: Short answer, no. We haven't
15 done any particular studies in relation to that.

16 MR. GRAINGER: A follow-up question, then. So
17 you don't know, with any certainty, that the
18 175,000 cubic metres a year, your future design
19 flow, would be able to meet those standards,
20 specifically? You can't say, with certainty, that
21 they could -- or, it could?

22 MR. FARYNOWSKI: No, the short answer is no.
23 And that's why we discussed with Parks, and came to
24 -- that was part of the reason that we had a
25 concern, is that we may not be able to afford to do
26 something, and that's why we talked to Parks and
27 said, can we work together on this if there is a
28 problem. And we feel that, with the support of a

1 federal organization, like Parks, and the need for
2 preserving that park in the present state that they
3 want to, that, by working together, we can meet it,
4 and neither one of us will go bankrupt.

5 MR. GRAINGER: When you approached Parks, and
6 back to what Bob was talking about, the wetlands,
7 which was originally included in the entire system,
8 I mean, it seems to me that the wetland would
9 provide the further treatment and polishing, that
10 you would meet the more stringent standards after
11 the wetland. Did you pursue that with Parks? And
12 I'll have a line of questioning, later, for Parks,
13 about that; as to why the wetland has been
14 discounted in this equation.

15 MR. FARYNOWSKI: Yes, we did talk to Parks about
16 it, and I think you'll get your answers from Parks,
17 why. Because they have a standard of what goes
18 into the park. And so, therefore, yes, the
19 wetlands, in our analogy, was that we couldn't
20 depend on it. Because, if the wetlands was on the
21 other side of the highway, yes, we could; but,
22 because it was in the park... and in order for us
23 to use it in the park, we would have to get an
24 Order in Council, and it was something that was
25 probably virtually impossible to get.

26 But we have to remember one
27 thing; that when the system was designed, it was
28 done in consultation with Parks, the location was

1 picked, and it was agreed to by Parks at that time.
2 It's since the system was designed that Parks have
3 made some changes in their regulations. And we, as
4 good citizens, have agreed to make every effort to
5 work with them to meet those standards.

6 MR. GRAINGER: So, when you discussed this
7 issue with Parks, you know, in this recent
8 application, as compared to what Parks had agreed
9 to 10 years ago, their stance was, they told you
10 that they wanted a higher effluent quality as that
11 effluent crossed the boundary?

12 MR. FARYNOWSKI: That's correct.

13 MR. GRAINGER: My last question, then, to you,
14 Mr. Farynowski and your delegation, you indicated
15 that the ditch crossing, that crosses the old
16 pasture, is now -- crosses settlement lands, or an
17 agreed-to land claims settlement lands. Do you
18 have permission or an easement from the owner of
19 that land, to cross your ditch through and -- you
20 know, because that's your conduit to the wetlands
21 and, eventually, the Dezadeash River.

22 MR. FARYNOWSKI: Well, the effluent from block
23 30, which is Champagne-Aishihik community, comes
24 through our system, so they're part of the user of
25 this system. And we've discussed with them, and
26 they've written letters of support, both for the
27 well and -- and we don't have a problem with them,
28 because they are an almost 30% user.

- 1 MR. GRAINGER: Yes, I understand that they
2 contribute to your system, and you've worked out
3 arrangements that way. But I guess I'm asking,
4 specifically -- you know, if somebody changed their
5 mind, if you don't have an easement or a right-of-
6 way -- I'm just asking about the status of the land
7 tenure in that area. I would hate to see you, you
8 know, somebody -- not pull the plug, but stop the
9 plug on you that way.
- 10 MR. FARYNOWSKI: We'd have to check that we have
11 an actual easement. I know we have an agreement.
- 12 MR. GRAINGER: Would you agree it would be
13 prudent, perhaps, to -- if it's titled land, to
14 obtain an easement? Or would the Village be
15 content with simply a clear letter of understanding
16 between yourselves and the owner of the land? Is
17 it an individual, or the band?
- 18 MR. FARYNOWSKI: It's the band; it's Champagne-
19 Aishihik.
- 20 MR. BOEHMER: Figure 2 of the application
21 shows there's an easement across there, and I'm
22 pretty sure there's an easement. When we put the
23 facility into service in '86, there was an easement
24 at that time.
- 25 MR. FARYNOWSKI: That was Parks -- or, that was
26 the game farm -- or, the original agricultural
27 farm. But when it was transferred over, I'm sure
28 the easement was taken care of. But we'd have to

1 check to confirm if it was. But I know, in
2 discussions with them, that it's not a problem. So
3 I think I would feel comfortable if we had a letter
4 of agreement, at the very least, and I believe we
5 have that. But we may have an actual easement, and
6 we could confirm that.

7 MR. GRAINGER: Yes. It's just been my
8 experience that sometimes these easements, that you
9 think you have, haven't got registered, and you're
10 surprised one day, when, in fact, you don't have
11 one. And if there's a little bit of uncertainty,
12 it would be a good idea to double check that, I
13 think.

14 MR. FARYNOWSKI: Yeah, it's a good point. And
15 like the wetland, we thought we had use of it, and
16 we don't any more.

17 MR. BOEHMER: Depending on how long the lunch
18 break is, I'll swing back and check that. I'm
19 fairly confident we have it, and I'll bring back
20 some sort of proof that we have it.

21 MR. GRAINGER: Okay. Thank you for that. I
22 think we'd like to take an hour for lunch, and be
23 back here at 1:15.

24 Any Board members have anything
25 else? Mike?

26 MR. JOHNSON: We have on record a March 29th
27 Village of Haines Junction letter, addressed to
28 Bill Slater. And in that, it spoke to the Village

1 expecting, having undertaken to agree to the higher
2 standards, full financial resources for any
3 upgrading that might be required.

4 When I look at the MOU, there
5 is wording about ongoing communication, exploring
6 possible alternatives, and item 3 in the
7 resolution, to explore or work towards possible
8 sources of planning, design expertise and funding
9 support. Does that translate, in the Village's
10 mind, the type of financial support -- do you
11 believe you've got a commitment from that federal
12 agency, for the type of financial support you'd
13 need to upgrade, if you had to do it?

14 MR. FARYNOWSKI: We feel that that's --
15 considering being a federal department, that that's
16 the best kind of agreement, and that they would
17 make every effort to help us in getting support,
18 and we feel comfortable enough with it, yes.

19 MR. GRAINGER: Anything else from the Board
20 members? Okay, we'll break for lunch, and come
21 back at 1:15.

22 (Proceedings adjourned at 12:10 p.m.)

23 (Proceedings reconvened at 1:32 p.m.)

24 MR. GRAINGER: Like to reconvene the hearing.
25 It's 1:32. Just before Lynn starts, the Board did
26 have one other question of the applicant, if I
27 could. I just wanted to throw this out, and maybe
28 get a reaction from the applicant.

1 A concern that we have, in your
2 written application in 1999, you applied for wells
3 3 and 4. And in your discussions this morning,
4 you're asking that number 5, proposed well number
5 5, be included in the licence. And that was
6 reflected in the CEAA screening. As well, you've
7 indicated that there's a possibility that you might
8 need to use well number 1 in the event of an
9 emergency.

10 I guess the quandary we have is
11 that, you didn't apply for wells number 1 or a
12 proposed number 5, and that may be problematic to
13 us. I just wondered if you could comment on that
14 for us.

15 MR. CORNETT: With respect to wells number 1
16 and 2, they were in the application, in the
17 information sheet, contained with that. And they
18 were part of the licence renewal; they were already
19 in the licence, and we just said, Don't change it.
20 So those wells were in the application, and as part
21 of the information sheet. We're just
22 demonstrating, or pointing out to the Board, that
23 they should be noted in there as possible -- well,
24 they're just wells that the Village has, and could
25 be used as water sources. Leave that door open for
26 the Village.

27 With respect to well number 5,
28 the application did note that the Village would be

1 looking for some future water source, at some point
2 in time. And I think the comment that John had
3 made was, these things just transpire over a period
4 of time, and that well has become critically more
5 important to the Village. And these things,
6 licensing and assessment processes, take a
7 significant amount of time; let's try and get it on
8 the table. And one of the ways to bring that
9 subject forward was having that discussion at the
10 environmental assessment stage, and trying to deal
11 with it at that point, as well.

12 MR. GRAINGER: I guess one of the problems is
13 that well number 5 doesn't exist; there's no
14 information on it; there's no indication of what
15 aquifer it would be tapped into; what the impact on
16 the surrounding aquifers would be. We can perhaps
17 just move on, but it's a bit of a quandary for us,
18 as to what to do with it. There's no information
19 on it because it doesn't exist.

20 Second question, can you just
21 confirm for us that well number 2 would solely be
22 used as an observation well for number 3; it's
23 never intended that it will be used for domestic
24 consumption?

25 MR. FARYNOWSKI: That's correct. It's quite
26 close to number 3, and it seems to -- the water
27 table fluctuates at number 3. So our
28 instrumentation, for monitoring 3, is actually

1 installed in 2. It makes it easier when you're
2 changing pumps in an operating well.

3 And the casing's perforated
4 higher up in that well number 2, and it sucks a lot
5 of silt. So it's not a well that we could pump on.
6 It's a monitoring well, is all it is.

7 MR. GRAINGER: Okay, thank you, John.

8 I guess we'd like to hear from
9 Yukon Government, Environmental Health; if you
10 could give us your presentation, Lynn.

11 **PRESENTATION BY HEALTH AND SOCIAL SERVICES**

12 MS. RICHARDS: Lynn Richards, Acting Manager
13 and Health Officer.

14 I'd like to start -- what I'll
15 do is go over our -- the Yukon Government's mandate
16 and activities, regarding drinking water quality.
17 I'd like to start with... our mandate is specified
18 in section 18 of the Public Health Regulations,
19 O.C. 1958/079. And this is pursuant to the Public
20 Health Act -- Public Health and Safety Act.

21 Section 18 says that every well
22 or other source of water supply, and every source
23 of ice cut for use for human consumption, or in
24 connection with the manufacture for sale of food or
25 drink, including storage, handling, intakes,
26 transmission and outlets, shall be subject to
27 inspection and testing by a medical health officer

1 or health officer.

2 This area, between 17 and 21,
3 of the Public Health Regulations, is where it
4 directly pertains to water supplies. And this
5 section is relevant to this hearing. The other
6 section that's quite relevant to the hearing is
7 section 17, which puts responsibility on the
8 incorporated municipality, who provides and
9 maintains one or more wells or other sources of
10 water supply for the use of the inhabitants, and
11 shall be responsible for the safety of such supply.

12 That is the regulation which
13 specifically pertains to water supplies. And in
14 light of events, such as Walkerton and
15 reaffirmation at North Battleford, the Yukon
16 Government has further focused such activities in
17 regards to looking at what our mandate is in
18 regards to drinking water quality.

19 Just to outline, briefly, a
20 work plan that is -- I understand is in effect, the
21 Yukon Government has contracted a consulting
22 engineer to do a project for the internal use, so
23 that we may respond more quickly when problems
24 arise. This project, called the "Community Water
25 Systems in the Yukon Project", includes Haines
26 Junction, and it will also assist water purveyors
27 in assessing the existing drinking water system.

28 This project, it's in its

1 second phase. It involves data collection and
2 research, as well as community visits to view and
3 document the infrastructures. The project will
4 look at water source, water treatment, storage,
5 distribution and operation and maintenance, from an
6 engineering and public health perspective. Its
7 second phase is due to be complete, and which is
8 its final phase, for our review, in the end of
9 September.

10 From this, what I understand is
11 that the Yukon Government will start looking at
12 policy around drinking water systems/drinking water
13 quality in the Yukon. In particular, this is
14 focused at community water supplies.

15 It is also my understanding
16 that the policy development should be into its full
17 force -- not full force, but into its development,
18 fully, by the end of this year, and likely to also
19 result in stand-alone drinking water regulations.
20 As opposed to just having a very small section
21 within the Public Health Regulation

22 I also want to point out that,
23 even though this is a section that is in the Public
24 Health Regulation that just pertains to the
25 drinking water quality, health officers and the
26 medical health officer have powers, within the
27 other portion of this regulation and other
28 regulations under the Public Health Act, to do

1 mitigation and enforcement where a public nuisance
2 has occurred.

3 In regards to the Village of
4 Haines Junction, I will refer, now, to the letter
5 that was sent, dated -- to the Village, Mr. Colin
6 Dean, of January 30th, 2001, which I understand has
7 been submitted. And looking at requirements --
8 this was originally written in lieu of -- well, not
9 in lieu of... we were going to do this -- this was
10 all-involving, but it starts out looking at that
11 this might be not within the water licence.

12 I also would like to point out
13 the wording "until further notice". "Until further
14 notice" means that, when policies and legislation
15 come into place, there may be other kinds of
16 standards that are applied. Also, too, is that we
17 use -- currently use the Guidelines for Canadian
18 Drinking Water Quality, as a standard to which we
19 apply. Those are constantly changing and constantly
20 updating. So, as the national standards update, so
21 might the requirements.

22 Currently, what is expected of
23 Haines Junction, for our mandate, is similar to
24 what was expected under the previous water licence.
25 However, I want to also point out that we are not
26 necessarily asking for a biannual chemical. What
27 might happen, and is likely to happen, is that, if
28 there are different aquifers, we will ask for a

1 chemical from each aquifer, because it will be
2 considered a different source. We will be looking
3 at annual. And, also, based on the project and the
4 information coming in, that might change one way or
5 another. But, generally, annual, if you have --
6 depending on the aquifer, has been noted at --
7 actually, some places are like three to five years,
8 depending on the aquifer, and what kinds of changes
9 might be within -- you know, chemical changes. It
10 doesn't change like bacteriological does.

11 There is a list. I haven't
12 compared -- this is a standard chemical parameters.

13 And also, too, again, we're
14 going to be working with the Village of Haines
15 Junction, in coordination with our consulting
16 engineer, as to things like frequency and sampling
17 sites. Currently, they meet the Guidelines for
18 Canadian Drinking Water Quality. All the samples,
19 in the year 2001, have met that requirement. And
20 the sampling frequency has done so, as such.

21 In review of the -- I
22 understand, in my notes, that there's consideration
23 for a clause, a possible clause to be put in. And
24 it's a clause that says, The licensee shall comply
25 with the requirements of the Yukon regulations
26 respecting public health, pursuant to the Public
27 Health and Safety Act, including but not limited to
28 any orders issued by the medical officer of health

1 officer for drinking water quality and drinking
2 water sampling and analysis. We have certainly no
3 objection to anything being put in the water
4 licence. We will be performing our mandate. I
5 would like to make two comments in regards to that.

6 You may wish to consider, in
7 the likelihood that there might be stand-alone
8 regulations, not to -- you know, within the next
9 year, not to consider restricting it to a specific
10 regulation. You could say "regulations pursuant to
11 the public...", you know, so that it may apply to
12 changes, in the next 20 years, of the regulations.
13 Acts are probably less likely to change.

14 The other consideration is that
15 the appointment is for a "medical health officer".
16 There is no appointment to a "medical officer of
17 health". The terminology is not correctly
18 reflected from the legislation. It is a "medical
19 health officer".

20 And, in light of section 18,
21 which will probably be expanded out, duties
22 regarding drinking water quality, orders can be
23 issued, also, by a health officer, and you may wish
24 to consider the inclusion of that.

25 The other thing I want to touch
26 base on, since there were two questions, I ran back
27 to the office to grab the B.C. Water and Wastewater
28 Association's Operating Education Program, to help

1 answer some questions. There is also a committee,
2 which Patricia Brooks, an environmental health
3 officer, is also in attendance, that's looking,
4 currently, now, at requirements for having
5 operators, not just of the Village of Haines
6 Junction but any operators for community supplies,
7 to be certified.

8 Now, this is one of the
9 programs that they were looking at; there are
10 several others, and they're also looking at
11 something from Anchorage, I do believe. But just
12 to let you know that the small water systems
13 training, that is offered by the B.C. Water and
14 Wastewater Association, is designed to provide the
15 basic knowledge and skills necessary for a water
16 distribution treatment operator, to operate a small
17 water system, and the knowledge to achieve small
18 water systems operator certification, within the
19 environmental operators certification program.

20 The course description is,
21 working knowledge of water distribution and water
22 treatment practises, and focuses on the basic
23 aspects of system construction, operation and
24 maintenance. Of course, it's of value to all
25 operators of water distribution and/or water
26 treatments, particularly those that serve a
27 population of less than 500.

28 And upon completion of the

1 course, which it is a two-day - so it's 16 hours -
2 they may -- sorry, lost it -- combined with
3 experience, may apply to write the certification
4 exam.

5 Now, I understand this is one.
6 When I actually tried to attempt to get a course
7 outline off the website, over lunch, I couldn't get
8 anything that would give me anything more than
9 this. But what I did notice, there was, like,
10 water treatment plant at level 2 operator -- like,
11 there's different levels, I guess, of operators.
12 But this is the one that the committee had looked
13 at.

14 I do believe the likelihood of
15 policy and regulations will look at requirements
16 for certification, as other jurisdictions have done
17 so.

18 The other thing that the Yukon
19 Government has done, it has assigned an
20 environmental health officer, who isn't a health
21 officer, to be a project leader on the drinking
22 water program. And when she returns from Winnipeg,
23 that will be her only duty. So we're going to be
24 removing her field inspection duties, and having
25 her concentrate, from now until the end of the
26 year, on just the drinking water program, and
27 anything that is involved around that, including
28 policies, and possibly rolling out to

1 recommendations for regulations.

2 The other thing that the Yukon
3 Government has done, it has purchased a database
4 system. Currently, what happens is, the Village of
5 Haines Junction would send in their water samples,
6 which they have done, according to our request in
7 the letter, that's confirmed, and we've received
8 four samples a month, from the wells, for the raw
9 and the treated supply. And it would come in, we
10 would run the samples. If there was any problems,
11 of course, we would phone them immediately, because
12 they get read at 24 hours after they're run.

13 Then that information then goes
14 into an access database. And we can query the
15 database, as I did yesterday, to see what samples
16 have been sent in.

17 Now, looking at that we're
18 wanting to sort of improve that system, the
19 government has purchased what's called a "Hedgehog"
20 system. And the Hedgehog system is designed for
21 environmental health services, which are offered
22 across Canada. We have also purchased, in addition
23 to the core facility management program, we've
24 purchased the sampling module. The sampling module
25 has the capability of requisitioning samples.

26 So we program in, every 14 days
27 we're expecting a sample. What will happen, it
28 provides a much more secure bring-forward system.

1 Because, if they don't meet the requisition, that
2 will show as outstanding. So, it allows us to
3 better monitor whether the samples are being
4 submitted. Also, too, it will have much more
5 detailed information in regards to the facility,
6 the sampling points, etc., and it also will run, I
7 think, better query programs than just your access
8 database. So that's another activity that has been
9 undertaken by the government.

10 I think, at this point in time,
11 I'm open to answering questions.

12 MR. GRAINGER: Thank you, Lynn. Does that
13 conclude your presentation, then; other than
14 answering questions?

15 MS. RICHARDS: Yes, thank you.

16 MR. GRAINGER: Okay. Then, at this point,
17 we'll entertain questions from the two intervenors,
18 the applicant, and then Board members and our
19 technical consultants. So we'll start with... any
20 questions from DIAND/Parks Canada?

21 MR. SHERSTONE: Yes, Mr. Chairman, we have a
22 number of questions, and I'm going to ask Mr.
23 Slater if he would address those to Health.

24 **HEALTH AND SOCIAL SERVICES QUESTIONED BY DIAND/PARKS**
25 **CANADA**

26 MR. SLATER: I have a series of questions
27 here. You mentioned potential development of some

1 specific drinking water regulations. What do you
2 see as a time period for that?

3 MS. RICHARDS: My understanding is that there
4 has been a time period for the policy, but I do not
5 know what Cabinet's intention is. My
6 understanding, that there is a political will to
7 move towards stand-alone drinking water
8 regulations. I'm sorry, I don't have the answer,
9 specific answer for that. Unless you're just
10 asking for my personal opinion.

11 MR. SLATER: That would be fine, thanks.
12 The letter, Exhibit 8.2, that you brought in this
13 morning, references a requirement for total and
14 faecal coliform analysis, twice per month. And
15 you'd also mentioned that you do use the Guidelines
16 for Canadian Drinking Water Quality, as a sort of
17 standard.

18 The sampling frequency
19 identified in there is four times per month. Is
20 there a reason for that difference?

21 MS. RICHARDS: Difference than what?

22 MR. SLATER: Between what the Guidelines
23 specify as a sampling frequency, and what you've
24 specified in your letter.

25 MS. RICHARDS: I have a copy from the
26 Guidelines. And this is from Sixth Edition. And
27 for the population served, of up to 5,000, the
28 number of samples per month is four.

1 MR. SLATER: Right. And the letter says
2 twice per month.

3 MS. RICHARDS: With a total of four.

4 MR. SLATER: Oh, so you're saying four,
5 including both wells?

6 MS. RICHARDS: Yes.

7 MR. SLATER: Okay. Thank you.

8 MS. RICHARDS: And understand, is that this is
9 -- if there are more wells in operation, you would
10 require more samples. You're looking for the raw
11 and treated.

12 MR. SLATER: Okay. You mentioned that you
13 do apply these Guidelines as standards. I guess my
14 question on that is, there's a set of limits for
15 various parameters in those standard -- in those
16 Guidelines. How do you apply those as standards;
17 what's your, sort of, approach to that?

18 MS. RICHARDS: The approach is that, if
19 they're health related. Aesthetic concerns would
20 have to be discussed at the medical health officer
21 level.

22 MR. SLATER: So, if a water supply were to
23 exceed a certain one of the non-aesthetic
24 parameters, what would be your response?

25 MS. RICHARDS: It really depends on what
26 parameter you're looking at. And there would be
27 that we would phone the Village, explain -- you
28 know, make sure they had the information, look for

1 a potential cause of that and, depending on what is
2 the risk involved, we would then make a
3 determination. But if you're talking about faecal
4 and total coliforms... is that more where you're
5 going? Or are you -- you're going down the
6 chemical?

7 MR. SLATER: I'm not, sort of, separating
8 out between one or the other, really. I guess I'd
9 be interested to know what your response would be
10 to faecals -- totals and faecals, but any sort of -
11 - I mean, when you say you're applying them as
12 standards, I'm just curious how -- is that sort of
13 a line in the sand that says, you cross over this
14 line and this is what's going to happen? Is there
15 a regulatory mechanism whereby you apply these as
16 standards; or, in fact, are you, by policy,
17 applying the Guidelines more as a guideline?

18 MS. RICHARDS: The medical health officer
19 would receive that information, and they can place
20 orders based on information that they've gathered
21 and researched, that we do, if a particular
22 parameter. So we can issue orders for boil water,
23 use of alternate systems.... We've also talked
24 about, you know, purveyors having contingency
25 plans. But it also depends, if you're going to get
26 a particular parameter that's higher, there's
27 generally a reason for that; especially if you're
28 looking at very confined aquifers. Something may

1 have changed.

2 So, really, we do have a
3 regulatory means, but it definitely would be the
4 medical health officer making that determination.

5 MR. SLATER: Okay. Before I, sort of,
6 proceed down this questioning, in terms of the
7 monitoring requirements and whatnot, for drinking
8 water, I want to make it clear that the discussion
9 is quite a bit broader than simply the Village of
10 Haines Junction; and that we're not trying to draw
11 into question the existing water quality within the
12 Village of Haines Junction. It's merely a question
13 of how do we regulate these requirements.

14 I just wanted to sort of put
15 that forward as a caveat, before we discuss too
16 much on this.

17 I guess the next question
18 relates to the question of mandate. And there
19 seems to be at least three agencies here, today,
20 that have some mandate for water use by
21 municipalities. And Health clearly has a mandate
22 related to insuring that people have safe water to
23 drink. And, as you mentioned, your legislation
24 sort of transfers some of that responsibility to
25 the providers of drinking water. And the Board
26 obviously has a mandate for water management in the
27 territory, especially as it relates to issuing
28 water licences for municipal uses. And DIAND, as

1 well, has some overall mandate for water management
2 in the territory.

3 Do you think there's a clear
4 distinction between these mandates, as far as it
5 relates to drinking water; and if so, where do you
6 think that distinction should be drawn?

7 MS. RICHARDS: I would like clarification from
8 the Chair... my understanding was to talk to --
9 give an overview, but really address the Village of
10 Haines Junction. And I was also under the
11 understanding that there was a recommendation that
12 this type of questioning would probably be done at
13 a separate session. I'm not trying to avoid the
14 answer; I just want to insure that I get
15 clarification on that. And I did not necessarily
16 come prepared to answer, like, the broader
17 philosophy around, you know, the mandates, other
18 than how, kind of, it applies to Haines Junction in
19 sort of an overview.

20 And I can say that, you know,
21 right now, there are discussions -- we're seeing
22 there are different mandates, and we're working on
23 clarification of those. And a lot of that will be
24 developed within policy.

25 And just wanted to get
26 clarification as to whether I should respond to
27 this on a broader manner, at this hearing. I just
28 want clarification.

1 MR. GRAINGER: Certainly, we want to limit our
2 discussions to the information before the Board,
3 relative to the Haines Junction application. I
4 think, in a broad -- well, in a broad sense, in
5 terms of how it relates back to the application,
6 you could answer. But I don't think we expect you
7 to spend a long time, or, you know, try and give a
8 long dissertation on policy or developing policy.

9 I mean, this particular
10 subject, you know, goes beyond -- as Mr. Slater has
11 pointed out, goes beyond the specific application,
12 and we do want to try and keep things focused on
13 the application. I don't know if that helps you.

14 MS. RICHARDS: It does. Because C&TS is
15 really not involved, other than probably a
16 management committee for, you know, monies for
17 infrastructure or whatever, with the Village of
18 Haines Junction. So, because they're an
19 incorporated, C&TS, who is also a water purveyor
20 for non-incorporated communities, that's separated
21 out from this particular hearing. Probably the
22 question is, you know, regarding our mandate, as
23 far as the Yukon Government, which I have outlined,
24 and DIAND's mandate in regards to the CEAA. My
25 understanding is that they have sought legal
26 opinion on that, and our government has also sought
27 legal opinion on where that tries to lie. But I
28 wasn't -- And my understanding is that we will do

1 our mandate as per our regulations and our policies
2 and our development of regulations, regardless of
3 what your considerations for the applicant are. We
4 will be working directly with the applicant as I've
5 outlined.

6 MR. GRAINGER: Why don't you try and answer
7 the questions specifically related to what you know
8 about the Haines Junction application, then, and
9 the comments made in the Haines Junction CEAA
10 screening and interventions. And for DIAND, if you
11 can try and focus your questions related to the
12 Haines Junction specifics, as contained in your
13 CEAA screening and your intervention. Otherwise,
14 it just gets too broad.

15 MR. SLATER: Sure, that's not a problem.

16 MR. GRAINGER: This may not be the place to do
17 that. Hopefully, that helps. Does that answer --
18 did you get your question answered, then, Mr.
19 Slater?

20 MR. SLATER: Probably as well as we can,
21 under the circumstances, I would say, yeah. That's
22 fine.

23 MR. GRAINGER: Sure. Carry on.

24 MR. SLATER: The Haines Junction screening
25 report, along with several other recent screening
26 reports, in that DIAND has specified mitigation and
27 follow-up measures that are intended to insure that
28 significant adverse effects on human health aren't

1 likely to occur. And those mitigation and follow-
2 up measures have been in five main areas in
3 relation to drinking water quality: water treatment
4 requirements, generally chlorination; drinking
5 water standards; monitoring requirements; reporting
6 requirements; and response to any concerns
7 identified by the monitoring.

8 Would you agree that those five
9 areas are all pretty critical in insuring the
10 safety of our public drinking water supplies?

11 MS. RICHARDS: Yes, I do.

12 MR. SLATER: So, in the absence of
13 conditions in water licences, recently, and also in
14 this Haines Junction licence, as well, we've got
15 the same type of conditions as in the other recent
16 ones, DIAND has relied on orders from the medical
17 officer of health, to fulfill the intent of the
18 screening reports. These, like this letter to
19 Haines Junction, Exhibit 8.2, have been issued to
20 specific communities in letter form, and they
21 specify monitoring reporting requirements; they
22 don't specify standards, although we already talked
23 about that aspect a little bit earlier.

24 Do you think that those five
25 aspects, water treatment standards, monitoring,
26 reporting and response, are adequately addressed by
27 that mechanism?

28 MS. RICHARDS: By the mechanism of --

1 MR. SLATER: Of the letters.

2 MS. RICHARDS: Of the letters.

3 MR. SLATER: And I suppose, in addition, any
4 other orders that you may have the ability to
5 issue.

6 MS. RICHARDS: Yes.

7 MR. SLATER: Okay. Those orders... is there
8 a mechanism for enforcing the orders, that can be -
9 - enforcing those orders?

10 MS. RICHARDS: Yes.

11 MR. SLATER: And what is the mechanism?

12 MS. RICHARDS: Summary conviction, through the
13 courts.

14 MR. SLATER: So, if somebody doesn't comply
15 with the order, they can be convicted under the
16 Public Health and Safety Act?

17 MS. RICHARDS: That's correct.

18 MR. SLATER: And that, I presume, would be
19 the same under the new regs, because changing it
20 would require changing the Act, I presume?

21 MS. RICHARDS: I'm sorry, I --

22 MR. SLATER: The enforcement mechanism would
23 remain the same if you were to develop new regs?

24 MS. RICHARDS: Yes, that's true. Unless, at
25 the time, that they reconsider also updating the
26 Public Health and Safety Act. But I believe the
27 mechanism will remain the same.

28 MR. SLATER: What kind of penalties are

1 attached to those kind of violations?

2 MS. RICHARDS: Without having the regulations
3 in front of me, I'm pretty sure that it's %5,000 a
4 day, and I can't remember the conviction time, or
5 both.

6 MR. SLATER: The final couple of questions
7 relate to Exhibit, I think it's 8.4, which is the
8 Sierra Legal Defence Fund -- yes, it's 8.4, the
9 Sierra Legal Defence Fund report, called
10 "Waterproof - Canada's Drinking Water Report Card".
11 In that report, the Sierra Legal Defence Fund did
12 an evaluation of various jurisdictions across
13 Canada, and rated Yukon the second lowest, with a
14 D-minus. So it was slightly lower than Ontario --
15 the evaluation of Ontario, in pre-Walkerton
16 conditions. And the only strong point that was
17 identified, in that evaluation, was that there was
18 monitoring requirements established in water
19 licences.

20 Now, recognizing that the
21 report wasn't intended to evaluate the safety of
22 drinking water, but rather the ability of the
23 regime to insure safe supply, do you think that
24 that was a fair analysis?

25 MS. RICHARDS: No.

26 MR. SLATER: What would be the reasons for
27 that?

28 MS. RICHARDS: It was evaluating our lack of

1 legislation, I would say, rather than what's been
2 in practice.

3 MR. SLATER: So you don't think that that
4 evaluation would change, now that we have not got
5 those kind of conditions in water licences?

6 MS. RICHARDS: The report will change. It
7 would actually be very different if we actually had
8 stand-alone regulations, which would probably
9 encompass current practices, but also look at
10 things like requirements for certified operators.
11 So that, in that way, it would change. And we've
12 already started looking at what kind of
13 requirements, whether we recommend they go down to
14 do the B.C.W.W.A., or if they have their other
15 certification programs that are more readily
16 available; the delivery of such, given that, you
17 know, the Yukon is quite -- the communities are
18 quite spread out; and the availability, the cost
19 and the criteria in those certification programs.

20 MR. SLATER: Okay, thank you, that's all the
21 questions I have.

22 MR. GRAINGER: Go ahead, Mr. Sherstone. Thank
23 you, Mr. Slater.

24 MR. SHERSTONE: Thank you, Mr. Chairman. There
25 are no further questions from DIAND.

26 MR. GRAINGER: Nothing from Parks Canada? You
27 were speaking for both of them?

28 MR. SHERSTONE: I should perhaps have clarified

1 that at the beginning, Mr. Chairman, I apologize.
2 Parks Canada and DIAND are doing a joint
3 presentation because of the very, sort of, inter-
4 linked nature of the CEAA screening. So we will be
5 doing a joint presentation all the way through.

6 MR. GRAINGER: Okay, so when I assume you're
7 done, that means, also, Parks Canada is done, for
8 the rest of the afternoon... for my information.

9 Mr. Farynowski, you had a
10 question?

11 MR. FARYNOWSKI: I just had a question of --

12 MR. GRAINGER: Sorry, John. We're following
13 our procedure. You'll get a chance to talk to Ms.
14 Richards after Environment Canada. Like, you're on
15 the list, but not just at this point.

16 MR. FARYNOWSKI: Oh, okay. My apologies.

17 MR. GRAINGER: No problem. Mr. Enns, anything
18 from Environment Canada?

19 MR. ENNS: Yes.

20 **HEALTH AND SOCIAL SERVICES QUESTIONED BY ENVIRONMENT**
21 **CANADA**

22 MR. ENNS: Lynn, am I right to understand
23 that this is the first type of this letter that's
24 been sent to a municipality in the Yukon, and that
25 this letter is being sent because the requirements
26 have been, or are being proposed to be, deleted
27 from the water licence; is that right?

1 MS. RICHARDS: Yes. I would say that was --
2 because they've always sent in samples, I guess,
3 and done the requirements, we had no need to send
4 out an additional letter to say, Do the same thing
5 that you're doing for us. And that was basically -
6 - and when we found that out, then we say, Okay,
7 we've already had requirements, they've always met
8 them; then, if that was not within their water
9 licence, then we need to then say -- because
10 they've always been coming to us, and we've always
11 gotten the information, then we need to say, You
12 need to still continue doing this.

13 MR. ENNS: And I'm not sure if I heard you
14 say that, even if the Water Board went back, now,
15 and did put monitoring back in the licence, that
16 you would still have this letter, or something like
17 it; did you say that?

18 MS. RICHARDS: I was mostly meaning that we'd
19 still be going forward on policy, looking at
20 criteria for certification, development of policy,
21 and the most likelihood of regulations. So we'll
22 be moving ahead to better enhance section 18,
23 anyways. Does that answer?

24 MR. ENNS: Yes. I just wanted to ask...
25 do you have any concerns about the adequacy of the
26 resourcing in your branch, in terms of fulfilling
27 an enhanced role in this area?

28 MS. RICHARDS: What I understand, and I

1 understand will be going to Cabinet, is, there's
2 been discussion -- there was a paper put out by
3 Community and Transportation Services, regarding
4 lab resources -- laboratory resources. And,
5 currently, the Environmental Health Services lab is
6 federally funded through the, I guess, Green Plan,
7 or Arctic Environmental Strategy.

8 So, currently, we are looking
9 at there's likelihood of a proposal going for an
10 enhancement of the laboratory services, to secure
11 that they continue. The option would be, if they
12 don't continue, of course, there's always the
13 availability of labs outside the territory. It's
14 just with the faecal and total coliforms, there is
15 a 24-hour, get it down to us, and that becomes
16 problematic, not necessarily for the Village of
17 Haines Junction, that can meet the plane
18 requirements, but other communities, like Old Crow
19 and Ross River, which may not have as good of
20 delivery service.

21 MR. ENNS: In terms of the total and
22 faecal coliform analysis, this is a role that
23 you've had all along; I mean, these are samples
24 that would be coming to you anyway, regardless of
25 this letter.

26 MS. RICHARDS: Yes.

27 MR. ENNS: The chemical part, I guess --

28 MS. RICHARDS: Will remain outside.

1 MR. ENNS: Yeah, being done by an outside
2 lab, right. But you would be reviewing the
3 chemical results -- as they would have been
4 submitted to the Water Board, previously, you'd get
5 a copy and you would review them. So that's not
6 changing, either.

7 MS. RICHARDS: No, that's not changing at all.

8 MR. ENNS: Right. Okay, that's all my
9 questions, thanks.

10 MR. GRAINGER: Thank you, Mr. Enns. Any
11 questions from the Haines Junction delegation?

12 **HEALTH AND SOCIAL SERVICES QUESTIONED BY HAINES JUNCTION**

13 MR. FARYNOWSKI: I just wanted to ask Lynn, with
14 all the records that you said you researched on
15 Haines Junction, have we ever had any problems?
16 Not only problems with the analysis, but with
17 submitting samples on time, or anything like that?

18 MS. RICHARDS: To the best of my knowledge, I
19 just pulled the ones from 2001, there's been no
20 problems.

21 MR. FARYNOWSKI: Thank you. I think Dan has
22 some.

23 MR. CORNETT: Just some further clarification
24 with regards to the applicability of some of the
25 questions that were raised in relation to the
26 application. Do you feel that the exhibit, that
27 DIAND has provided here, Exhibit 8.4, this

1 "Waterproof - Canada's Drinking Water Report
2 Card"... is there anything that raises concern, in
3 your mind, in relation to the Village of Haines
4 Junction?

5 MS. RICHARDS: No.

6 MR. CORNETT: Thank you.

7 MR. GRAINGER: I'll hear from Board members,
8 questions from Board members, starting with Mike
9 Johnson, on the right.

10 **ENVIRONMENTAL HEALTH QUESTIONED BY THE BOARD**

11 MR. JOHNSON: Just two jurisdictional
12 questions, but I'm thinking specifically of Haines
13 Junction. What is your mandate on First Nations
14 settlement land?

15 MS. RICHARDS: We apply -- unless they have a
16 bylaw or other legislation that they, in
17 themselves, have created, we apply the regulations,
18 Yukon Government regulations. That is my
19 understanding.

20 MR. JOHNSON: And my second question, I'm
21 just trying to get my head around the layers of the
22 onion here. In your second last paragraph, you
23 write: "Please note that municipalities, under
24 public health legislation, are responsible for the
25 safety of the water supply." So now I've got the
26 municipality responsible, we've got Yukon
27 Government, Environment Canada and DIAND. Can you

1 just give me your version of the -- if we get a bad
2 water sample in Haines Junction, who do we shoot
3 first, and in what order?

4 MS. RICHARDS: I hope it's not me... no. The
5 ownership of the system is with the Village of
6 Haines Junction. And they also have a
7 responsibility to put things in place, and it looks
8 like, with them having certified operators, other
9 kinds of things, that they get a responsibility
10 around that. The government's responsibility is to
11 inspect and monitor what the Village of Haines
12 Junction deems as their activities towards insuring
13 a safe water supply.

14 In reality, what happens is, is
15 that there's discussions between -- the interest
16 is, bottom line, we both have the same concerns
17 and, of course, that is to protect public health.
18 In doing that, communities and our office work
19 together in determining those -- what those aspects
20 are. And that is how we've been, in practicality,
21 operating within that role; as more of a joint
22 effort, without sort of singling out. But they
23 certainly are the ones responsible for insuring
24 that there's operators, and insuring that the
25 checks get done, the inspections get done. And we
26 do the monitoring of that.

27 MR. JOHNSON: No further questions.

28 MR. GRAINGER: Thanks, Mike. Oliver?

1 MR. JIM: My comments were the same as
2 Mike's, here, he just brought it out. No further
3 questions.

4 MR. GRAINGER: Dianna?

5 MS. RAKETTI: No questions.

6 MR. GRAINGER: Bruce?

7 MR. CHAMBERS: No.

8 MR. GRAINGER: Okay, I've got a couple. Prior
9 to this January 30th letter, Exhibit 8.1, went out,
10 when your department was advised that the Water
11 Board would not be including drinking water supply
12 monitoring in water licences, did you agree -- did
13 your department agree with what the Water Board was
14 doing; the explanation being that we felt the
15 mandate rested with your department?

16 MS. RICHARDS: Clearly, the mandate of
17 inspection/monitoring, as outlined in the
18 regulations, lies with our department. I guess
19 whatever the Water Board deems, you know, fit for
20 per applicant -- I guess our department went --
21 it's fine, either way. I mean, we're going to be -
22 - the bottom line is insuring public health. And
23 with the activities and the movement and the
24 political will, I guess I can say that I don't see,
25 myself, a necessity for duplication. However, the
26 Water Board played its role. It may want to change
27 its role, based on what kinds of activities and
28 regulations and policies are now being put in place

1 to insure that.

2 MR. GRAINGER: All right, second question, is
3 your department satisfied that doing the monitoring
4 for domestic water supplies fits in with your
5 mandate?

6 MS. RICHARDS: Yes.

7 MR. GRAINGER: Are you satisfied that your
8 department has the capability and the resources to
9 fulfill that function that used to be in the water
10 licences?

11 MS. RICHARDS: Consideration given that we do
12 not pay for the samples, we don't provide resources
13 for the communities to do the chemical analysis, we
14 require them to be done. And the resources, if
15 you're looking at financial, are the responsibility
16 of any community, as opposed to Environmental
17 Health. We do, at this point in time, offer a free
18 service for the bacteriological, which may or may
19 not change in the future.

20 But if you're looking at what
21 we're doing now, if that was to continue to exist,
22 like as far as who pays for what... is that --

23 MR. GRAINGER: No, my question is more related
24 to inspecting the monitors. You know, like, are
25 you satisfied that your department has the
26 capability and the resources to inspect the
27 monitoring, to examine the degree of monitoring
28 that the municipalities, or whoever the holders of

1 the water supplies are, are carrying out? That's
2 really your job, right?

3 MS. RICHARDS: Yes. Based on the government's
4 movement in hiring an engineering consultant to do
5 a fair amount of work, I see that there's political
6 will to do so. They're looking at proposals for
7 enhancement of the laboratory program. Based on
8 the information and my understanding of the
9 Ministry's -- you know, at my level, is that I feel
10 fairly comfortable in saying "yes".

11 MR. GRAINGER: Okay, thank you. Our legal
12 counsel wants to ask a question as well.

13 MR. GOWER: I just want to make sure that I
14 didn't miss something. When you were addressing
15 clause 7 in the preliminary draft licence, you went
16 through a number of points, and your second to last
17 point was correcting the reference to "medical
18 health officer", and you made one final point and I
19 just didn't catch it because I was making a note.

20 MS. RICHARDS: The third point was under
21 section 18, health officers also have the ability
22 to issue orders. So that, if you are excluding --
23 We're different appointments under Cabinet. To
24 cover all the, I guess, ability for enforcement
25 under section 18 of the Public Health regulations,
26 you may want to say "medical health officer and
27 health officers".

28 MR. GOWER: Thank you.

1 MR. GRAINGER: Bob Lorimer.

2 MR. LORIMER: Thank you. I have two or three
3 questions, Ms. Richards. The first one is, the
4 Exhibit 8.2... are all of the parameters, that are
5 listed in that letter, reflected in the Guidelines
6 for Canadian Drinking Water Quality?

7 MS. RICHARDS: No, they're not.

8 MR. LORIMER: Can you tell us which ones are
9 not?

10 MS. RICHARDS: Without having the document in
11 front of me, no. This is the standard -- B.C.
12 standard drinking water testing program, that we've
13 been using for applying to. So I, at this point in
14 time, without -- I know somebody's got a copy down
15 there, but there are many, many, many parameters.
16 And some, like petroleum, may or may not be
17 significant, and it could be just more cost than --
18 it doesn't appear to be necessary.

19 MR. LORIMER: You've actually answered the
20 second part of my question. The first part was
21 whether these parameters are all reflected in the
22 Guidelines. And then the second question I was
23 going to ask is, are there parameters in the
24 Guidelines which are not in this list?

25 MS. RICHARDS: I'm glad I answered two in one.
26 I'm sorry, I got the second question as your first
27 question.

28 Yes, these are all parameters

1 in the Guidelines for Canadian Drinking Water, and
2 they're not all the parameters that are listed.

3 MR. LORIMER: Okay. With regard, then, to
4 the ones that are in the Guidelines, that are not
5 here, in developing this list for the Village of
6 Haines Junction, have you looked at the
7 characteristics or the situation specific to Haines
8 Junction, in order to develop this list?

9 MS. RICHARDS: As you notice, as I pointed
10 out, "until further notice".... What we did, we
11 took B.C.'s regular drinking water list, added
12 mercury, or else arsenic, and insured that those
13 ones are in because they're common within the
14 Yukon. And this list is being -- why it says
15 "until further notice", the consulting engineer is
16 going to be involved in reviewing per community.
17 So that we'll get some feedback as to the
18 particular requirements for the Village of Haines
19 Junction, from the project that's been funded.

20 MR. LORIMER: So am I correct, then, in
21 hearing that you expect that you will be developing
22 lists, which are community specific or site
23 specific lists, that may vary from community to
24 community, depending on particular issues that you
25 identify? Is that a fair summary of what you just
26 said?

27 MS. RICHARDS: Yes. These parameters do cover
28 most of what -- It would be unusual kinds of

1 situations but, yeah, that's what we'd be looking
2 at, is insuring that these are adequate for each
3 community. And we've cited 23, and they're not all
4 municipal community water supplies. There's some
5 private that have a community that's their supply
6 for.

7 MR. LORIMER: I have a couple of further
8 specific questions in Exhibit 8.2. At the end of
9 the first paragraph, the sentence reads: "You are
10 also required to perform and record daily free
11 residual chlorine tests." Is there any requirement
12 to report the results of those tests, anywhere?

13 MS. RICHARDS: Not at this time. But that was
14 brought up. And I am unsure of what Patricia
15 Brooks, who is coordinating the program, has moved
16 on to. So I just was referring to this letter. So
17 it's available for inspection, but it is no -- at
18 this time, I don't know of any correspondence to
19 the Village of Haines Junction, requiring for them
20 to produce those records.

21 MR. LORIMER: Do you inspect those records?

22 MS. RICHARDS: We have the engineer going out
23 and doing the inspections, so they will be
24 inspected, at this time.

25 MR. LORIMER: Moving on to the next
26 paragraph, it says: "Chemical analysis is to be
27 carried out annually by an accredited lab, with
28 results being submitted to our office for review."

1 Can you tell us what that review process is; can
2 you lead us through what happens when those results
3 are submitted; what that review constitutes?

4 MS. RICHARDS: The review constitutes
5 comparing it against the Guidelines for Canadian
6 Drinking Water. Generally, accredited labs provide
7 highlights. They'll tag if a requirement, even if
8 it's aesthetic, does not meet the Guidelines. When
9 that happens, then we contact -- again, kind of
10 goes back to the answer to Mr. Slater. At that
11 point in time, we have to, then, immediately
12 evaluate and assess, and we would probably,
13 depending on the situation, of course notify the
14 Village immediately, and immediately notify the
15 medical health officer. And then discussions
16 pursue from there.

17 And, also, depending on what
18 that criteria is, if it's arsenic or if it's iron
19 or whatever, we get the research information, and
20 usually we contact researchers and scientists in
21 Ottawa.

22 MR. LORIMER: Can you give us some idea how
23 long that process takes?

24 MS. RICHARDS: It doesn't take long. I'm not
25 sure, if we get the results back from the lab --
26 quite often, they're faxed in. The City of
27 Whitehorse's are actually "medi-net"ed in. But
28 they're faxed in. Immediate contact. So, as soon

1 as received, if there was a problem. So, if it
2 comes in that day, be that day, and that day the
3 medical health officer would be informed, and a
4 meeting probably within two days.

5 MR. LORIMER: Is there a feedback loop in
6 this review process? Presumably, if a problem is
7 identified, then somebody from your office will
8 contact the Village of Haines Junction. If there
9 isn't a problem, is there still a feedback loop?
10 In other words, is there a response or a closure on
11 the review loop, so that, in fact, the conclusion
12 that things are okay is, in fact, transmitted back
13 to the Village?

14 MS. RICHARDS: With the City of Whitehorse, we
15 mail them the results. With others, previously, it
16 was not -- it was sent to the Board, so that -- and
17 we got samples. But there is -- it depends on, if
18 they get a copy, generally the reports actually
19 outline what's outstanding or not. And any person
20 can look at the report and see if it's highlighted
21 that it exceeds. If they don't get a copy, we
22 would get a copy and then immediately -- and then
23 we would send it to them, with it signed off as
24 being reviewed. So the person reviewing, signs and
25 initials -- or, sorry, signs and dates the report.

26 MR. LORIMER: And then that's returned to the
27 municipality?

28 MS. RICHARDS: Yes.

1 MR. LORIMER: One more final question. On
2 the second page of Exhibit 8.2, the paragraph that
3 says: "Our Department is currently reviewing its
4 policies and procedures with respect to drinking
5 water monitoring", is that reference in reference
6 to the project that you were talking about, which I
7 believe you called the Community Water Supply in
8 the Yukon Project, and your subsequent anticipated
9 review of policies and procedures? Is that what
10 that's referring to?

11 MS. RICHARDS: Yes.

12 MR. LORIMER: Thank you, I have no further
13 questions.

14 MR. GRAINGER: Thank you, Bob. I've just got
15 a couple to follow up. First of all, I just wanted
16 to correct... I referred to Exhibit 8.1, in my
17 first line of questioning to Ms. Richards; it's
18 actually Exhibit 8.2, the January 30th letter.

19 Is there anything in the Public
20 Health and Safety Act that focuses in on faecal
21 coliforms, other than what you're asking, here,
22 for, is at twice a month? Do you instruct the
23 municipality to test for faecal coliform on a daily
24 basis?

25 MS. RICHARDS: The answer to your first
26 question is, there is nothing in regulations
27 pertaining to a community drinking water supply.

28 In regards your second

1 question, you're asking about requirements for
2 daily testing or -- I'm sorry?

3 MR. GRAINGER: Yes, other than this January
4 30th letter, have there been -- you know, in the
5 wake of the Walkerton concerns, has there been
6 anything else gone out, in terms of instructions to
7 a municipality about testing for faecal coliform on
8 a daily basis?

9 MS. RICHARDS: No.

10 MR. GRAINGER: Okay. I'm just going to ask
11 the Village of Haines Junction... how often, on a
12 routine basis, do you -- what's the frequency of
13 testing for faecals?

14 MR. FARYNOWSKI: We do as required, every two
15 weeks. Although, we do random samples at other
16 locations; i.e. the school, Parks Canada building,
17 the water trucks that haul the water out of --
18 because, in case it -- We do it after the truck's
19 loaded, just to see what he's hauling out. Because,
20 ultimately, if somebody gets a bad load of water at
21 Canyon, they're going to blame us for it. So we do
22 some random ones. We have never had any problems
23 with any of the test results.

24 MR. GRAINGER: How often do you do those?

25 MR. FARYNOWSKI: Well, we do the two that are
26 required, and then we do, I think Parks Canada
27 twice a year, the school is done twice a year. We
28 do have a record of all this, I just don't have it

1 right here with me. But we do more than the
2 requirement, and always have. And in light of some
3 of the water problems, we even added a couple of
4 sampling stations that were just at the end of a
5 residential neighbourhood, but at the end of the
6 line, especially for residual chlorine and that,
7 just to see if some of these areas that were lower
8 water use still met.

9 MR. GRAINGER: And the coliform testing,
10 faecal coliform testing that you do do, you send
11 those in; you don't have a kit on site?

12 MR. FARYNOWSKI: No, we have to send it in.

13 MR. GRAINGER: Okay. Back to Ms. Richards,
14 then. Do you think it would be a good idea to
15 increase the frequency of faecal coliform sampling,
16 for a municipality like Haines Junction; that
17 situation?

18 MS. RICHARDS: No. The reason being, they're
19 in a confined aquifer. It depends on what well
20 they're using, and if there's any sense of sources
21 of contamination. Generally, in confined aquifers,
22 with properly constructed well and wellheads,
23 there's not necessarily a need for alarm,
24 especially on a chlorine -- when you're adding
25 chlorination. If their chlorine levels are --
26 That's the part that's being consumed, is when you
27 have a chlorine residual of .3 parts per million,
28 the necessity of daily -- the expense, for one

1 thing, is incredible, but the necessity is -- it's
2 not seen as necessary, because they're confined
3 aquifers, and the structure.

4 But, sort of in response to the
5 Mayor's comments, is that the other kinds of things
6 that the consulting engineer would be looking at is
7 the distribution points, and talking about where
8 the water goes, where's the end of the line, and
9 have end of the line sampling, end of line
10 monitoring of chlorine. So these things are kind
11 of the things that we'll be working with the
12 Village of Haines Junction to determine.

13 But the faecal coliforms, it
14 comes in -- that's total and faecal. What happens
15 is, they take a 200 millilitre sample, in a sterile
16 bottle, that has sodium thiosulphate, which
17 neutralizes the chlorine. They get it to us within
18 24 hours, and then we run both tests, a total
19 coliform and a faecal coliform, at the same time.
20 And we use a millipore filtration unit to do so,
21 and basically we grow the colonies.

22 MR. GRAINGER: Okay, thank you. I believe Bob
23 Lorimer has another question.

24 MR. LORIMER: This is a follow-up question
25 for Mr. Farynowski, relative to the response he
26 just gave a minute ago. You talked about some
27 supplementary faecal coliform tests beyond the
28 twice per month tests that are required by

1 Environmental Health Services. Can you tell us
2 what happens to the results of those tests? Are
3 they simply your information, retained there; or do
4 you forward them on to Environmental Health
5 Services; what happens to the results of those
6 tests?

7 MR. FARYNOWSKI: If I remember correctly,
8 they're recorded, and then they're part of the
9 annual report that we have to submit. But, in any
10 event, they're all on file. And also, our Works
11 people have instructions that, if any residual
12 chlorine test fails, we want it immediately
13 resampled, and I want to know about it.

14 So that, not only the first
15 failure, but the second, the re-test, and then
16 he'll test it again, the following day. Just to
17 make sure, in light of other things.

18 But, you know, we're in very
19 different conditions than Walkerton or North
20 Battleford, and I think we have to remember that.
21 We don't have a farmyard anywhere near our well.
22 The closest thing to our well is the river, and we
23 know when the river floods.

24 I just don't, personally, like,
25 you know, the references to Walkerton, because
26 we're in a completely different situation. We're
27 using deep wells; we're not in the same kind of
28 atmosphere. And it's things that the media get a

1 hold of and create panic in communities like ours.
2 And I try to avoid that.

3 You know, if we have to do
4 extra testing, I don't mind, but we have to
5 remember it's expensive, too.

6 MR. GRAINGER: Thank you, Mr. Farynowski.
7 You're done, then, Bob? Ms. Richards, a comment?

8 MS. RICHARDS: Just further to Mr. Lorimer's
9 question, all those for total and faecal coliform
10 come to Environmental Health Services for testing.
11 And if there are any problems, we immediately phone
12 whoever is on the -- deemed as the contact person
13 on that form, immediately, should there be any
14 problems. And it's recorded in our database.

15 Just to clarify... I wasn't
16 sure if that was answered.

17 MR. GRAINGER: Actually, that was going to be
18 a question I had, is, you're still providing that
19 service for the municipality. So you send -- the
20 Village would send a raw sample in for faecal and
21 total coliform testing, to you; that doesn't go to
22 a lab outside? Just the chemical results, the
23 municipality sends outside?

24 MS. RICHARDS: That's correct.

25 MR. GRAINGER: Any other questions from any
26 other Board members? I think, then, we'll move on
27 to the presentation from DIAND and Parks Canada.
28 Mr. Sherstone.

1 **PRESENTATION BY DIAND/PARKS CANADA**

2 MR. SHERSTONE: I just want to, if I can,
3 outline our presentation for you, and then we'll
4 proceed into it.

5 DIAND/Parks Canada does not
6 intend to review either its intervention or the
7 CEAA screening in detail. I'm going to ask Mr.
8 Slater to highlight the pertinent points, I think
9 the ones the Board most wants to hear about, on the
10 CEAA screening and the determination. Parks Canada
11 may, then, wish to add its comments, or interpret
12 its comments, for its own purposes.

13 It's important to remember that
14 DIAND and Parks Canada were jointly responsible --
15 joint responsible authorities under the CEAA
16 screening, so that is really why we're here today
17 in that way.

18 Once the CEAA screening is
19 complete, I want to make a number of points related
20 to DIAND's role as both the enforcement arm of the
21 Yukon Waters Act, as it relates to this licence,
22 and DIAND's broader concerns and responsibilities
23 for water quality, including, possibly, drinking
24 water quality. And I think you'll see why there's
25 some uncertainty there, when I get into the
26 presentation.

27 At the end of that part, I'm

1 going to ask Mr. Slater to come back and discuss,
2 perhaps in a little more detail, some of the stuff
3 he's already sort of hinted at, and it's with the
4 national issue and where the federal government, we
5 believe, fits into that national picture.

6 So, at this stage, I'm going to
7 turn it over to Mr. Slater and Mr. Breneman for
8 discussion of the CEAA screening.

9 MR. GRAINGER: Yes, that's fine. In about
10 another 15 minutes or so, I think we'll be ready
11 for a break, so just bear that in mind. I'll be
12 stopping about 3:00 o'clock, if that's all right.

13 MR. SLATER: Thank you. Thank you, Mr.
14 Sherstone.

15 I'm going to discuss a bit
16 about the CEAA screening report that DIAND and
17 Parks Canada completed as joint responsible
18 authorities. There were two responsible
19 authorities because of the, first of all, the water
20 licence, and potentially a Parks requirement for
21 use and occupation of Parks lands. But I'll let
22 Parks discuss that later.

23 The Dezadeash River wetland,
24 where the effluent is discharged to, is in the
25 park, as we've already talked about this morning.

26 Over all, the responsible
27 authorities under CEAA determined that the project
28 is not likely to cause significant adverse

1 environmental effects, as long as the mitigation
2 measures that are specified are adhered to. And
3 those are presented in detail in the screening
4 report, which is Exhibit 9.1. I'm not going to
5 discuss it in any great detail here.

6 I do wish to stress that those
7 are mitigation requirements, and that the RA's
8 can't approve those projects until they're certain
9 that the mitigation will be carried out. And
10 that's under subsection 20(2) of the CEAA, where
11 that requirement is specified.

12 So, like I said, we're not
13 going to talk about each of the mitigation
14 requirements today. Primarily because, with the
15 exception of the drinking water quality monitoring
16 and the well number 5 requirements, all of these
17 appear to be addressed in the preliminary draft
18 licence.

19 There are a couple of aspects
20 that we are going to touch on here. First, Mr.
21 Breneman, from Parks Canada, will provide some
22 details about the proposed effluent limits. And
23 the responsible authorities, both of us, DIAND and
24 Parks Canada, have specified minimum effluent
25 limits in the screening report, and that's beyond
26 DIAND's usual approach. We concluded that, in this
27 case, that was warranted, because it was a special
28 case, recognizing Parks' mandate. And we felt it

1 was necessary to actually identify those in the
2 screening report, because they were above and
3 beyond what is the normal effluent requirements
4 that would be specified in regulatory instruments
5 in Yukon. So that was the reason we felt it was
6 necessary to identify them in that manner.

7 The second point I'm going to
8 discuss a little bit about, is the additional water
9 supply, well number 5.

10 Now, before going to Parks
11 Canada, I want to talk a little bit about the
12 effluent limits, mostly coming back to some of the
13 discussion that went on this morning, in the
14 questioning of the Village of Haines Junction.
15 First of all, a question asked by Bob Lorimer,
16 regarding the table that was presented by the
17 Village, from the AESL report in 1980, and the
18 effluent limits that were identified in there.

19 That table presents -- I have
20 the AESL report here, in front of me. And that
21 table presents what AESL recommended as effluent
22 limits for a system designed with a total
23 population capacity of 2,000 people, expecting a
24 discharge twice yearly, with the first discharge in
25 June. Also at significantly higher use rates, as
26 Bob had noted; they were expecting something in the
27 56% range at the peak of this 20-year licence.

28 So, those were not specified as

1 what the system was designed to meet. They were
2 specified -- and it's perhaps worth reading just a
3 short quote here: "The following is a recommended
4 effluent quality standard that should be set for
5 the Haines Junction licence." And they go on to
6 present that table.

7 In the preceding discussion in
8 that, there's some lengthy discussion about what
9 the system can actually achieve, which is
10 significantly better. And, in fact, the appendix A
11 in that report presents what Yukon Government had
12 asked for in terms of design standards -- sorry, in
13 terms of -- yeah, in terms of design criteria; what
14 are we trying to achieve with this system.

15 What they presented, in their
16 sort of request for proposals, essentially, was a
17 B.O.D. of 30 to 40; suspended solids of 30 to 40;
18 pH of 6 to 8.5; and coliform bacteria of 20,000 to
19 200,000. As Dan mentioned this morning, the
20 coliform is probably the area where there would be
21 the most potential for concern.

22 DIAND also mentioned, there
23 were some options out there that could be
24 considered, if this system were not to meet the
25 requirements over the next 20 years, and Parks and
26 the Village would work together on those.

27 The other thing that came up in
28 the questioning was around the length of time

1 between discharges, which would still be able to
2 meet these new effluent standards. We don't have a
3 lot of information to guide us on that, but there
4 were two discharges that took place. The system
5 was built in 1986. There was a discharge four
6 years later. The results of the monitoring, from
7 that discharge, are presented in the screening
8 report. Certainly, there was no problem, then, in
9 meeting the effluent standards that are now being
10 proposed.

11 The system was discharged again
12 in 1992. That was two years after the first
13 discharge. Again, there was no problem meeting the
14 standards.

15 That would indicate that,
16 certainly, when we're down in that range -- I
17 wouldn't argue that, perhaps if it's running at
18 capacity, with a discharge every year, there may be
19 a problem; I don't know for sure, but that could be
20 a problem. It appears that something in the range
21 of two to four years probably won't be a problem.

22 So, having sort of responded to
23 some of that questioning from this morning, I'm
24 going to pass it over to Mr. Breneman, from Parks
25 Canada, to talk about those effluent limits.

26 MR. BRENEMAN: Thanks, Bill. I'm just going
27 to talk about some of the special circumstances
28 related to the discharge of effluent in Kluane

1 National Park. We've talked about the wetlands
2 are located within the national park, and they're
3 protected under the National Parks Act and its
4 regulations.

5 Both Parks Canada's mandate
6 derive from federal legislation, and policies state
7 that protection of the ecological integrity of the
8 park is paramount. In addition to the national
9 park status, there is a world heritage site, and
10 just 10 kilometres downstream of the discharge area
11 is the beginning of the Alsek Canadian Heritage
12 River. The world heritage site and the Canadian
13 heritage river status were both applied to this
14 area as a result of the National Parks' wilderness
15 qualities and pristine nature.

16 As Mr. Slater has talked, so
17 far, the effluent coming out of the sewage facility
18 has been substantially better quality than
19 anticipated in 1989 licence effluent standards.
20 These licence standards, however, raise concerns in
21 regards the potential long term effects on the
22 continued preservation of the downstream area.

23 The final point of control for
24 the sewage treatment facility is at the discharge
25 from the lagoons. While some further effluent
26 remediation likely occurs in the wetland complex,
27 there's no ability to further remediation or
28 control release to the broader environment.

1 The degree of effluent
2 remediation that occurs within the wetland complex
3 is beyond the control of the Village. The
4 effectiveness of the wetland and remedial effluent
5 is difficult to evaluate and monitor, since the
6 flow rates and discharge methods vary according to
7 water levels in the wetland and adjacent river.

8 We sought legal advice from our
9 department, in regards to a licence of occupation
10 by the Village of Haines Junction, to utilize the
11 wetlands within their Water Board licence. And our
12 counsel advises that the Minister does not have the
13 authority, under the National Parks Act, for this
14 type of activity, and we would have to proceed with
15 an Order in Council; and they couldn't give us an
16 estimate of time, on how long that would take,
17 other than that it would be substantial.

18 Preservation of Kluane National
19 Park warrants an extra duty of care under our Act,
20 as well as under our policy. The significance of
21 environmental effect must be measured against the
22 Parks Canada mandate to maintain the ecological
23 integrity of the park, and exercise due diligence
24 for the safety of park visitors.

25 Downstream of the wetland area,
26 we have both hiking trails and major river use.
27 The Alsek River, which is just downstream, is
28 considered as one of the 10 top rafting trips in

1 North America.

2 Maintaining this pristine
3 environment requires application of more stringent
4 effluent limits --

5 MR. GRAINGER: Sorry, if I could just stop
6 you. If you could just slow down, just a bit, for
7 our court reporter.

8 MR. BRENEMAN: Sorry.

9 MR. GRAINGER: Thanks. That's fine.

10 MR. BRENEMAN: Maintaining this pristine
11 environment requires application of more stringent
12 effluent limits than the Yukon Territorial Water
13 Board usually applies to municipal discharges.
14 Parks Canada recognizes that the sewage treatment
15 system has always produced effluent that exceeds
16 the quality specified in the federal guidelines.
17 Regardless, the likelihood of significant
18 environmental effects increase in direct relation
19 to reduction in effluent quality.

20 The only way to insure adequate
21 treatment, in our view, in the long term, is to
22 specify sufficiently stringent effluent limits.

23 As presented in table 2, page
24 12, of the environmental assessment, I believe it's
25 Exhibit 10.1, the Village of Haines Junction's past
26 licence for effluent discharge, while lower than
27 the Yukon Territorial Water Board licence, is
28 better quality than both the 1976 federal

1 guidelines, the draft federal guidelines, and the
2 national park standards.

3 Kluane National Park supports
4 Part B, clause 23, of the preliminary draft of the
5 water licence, which states: No effluent discharge
6 when the wetlands are flooded and there's a
7 connection to the Dezadeash River. This clause
8 provides for the additional potential to raise the
9 effluent quality, from and above the 1976 federal
10 guidelines, to that of what's proposed for national
11 parks.

12 In support of National Parks'
13 legislated mandate are regulations and policy, and
14 concerns related to ecosystem stressors. National
15 Parks generally recognize the need for discharge
16 limits more restrictive than those presented in the
17 draft Environment Canada 1976 Guidelines.

18 In this case, however, Parks
19 Canada has indicated that the application of the
20 federal guidelines will likely provide adequate
21 long term protection, since the sewage lagoons do
22 not discharge directly into the park's ecosystem.

23 In recognizing that the
24 potential level of additional renovation achieved
25 in the wetlands is beyond the control of the
26 operator, Parks believes that the federal
27 guidelines should be applied at the lagoon
28 discharge. While the additional renovation

1 occurring in the wetlands is beneficial, the
2 protection of the ecosystem can only be assured
3 through regulation of system aspects that are under
4 the control of the operator.

5 As the Village of Haines
6 Junction has discussed, we have had a long history
7 of working together, in regards to insuring
8 regional sustainable use, and quality of life for
9 the regional population base. Some of the examples
10 of our past joint initiatives have been the bear
11 fencing of the Village of Haines Junction landfill
12 site; the development of a Dezadeash hiking and ski
13 trail.

14 This recently signed Memorandum
15 of Understanding, Exhibit 8.1, between the Village
16 of Haines Junction and Parks Canada, is similar to
17 the above-mentioned joint agreements. Thank you.

18 MR. SLATER: Thank you, Mr. Breneman. One
19 thing I just wanted to highlight, from Mr.
20 Breneman's discussion, relates back to condition
21 number 23 in the preliminary draft licence. The
22 Village had mentioned, this morning, that they felt
23 it may not be necessary. As Mr. Breneman has
24 pointed out, Parks Canada still sees that as
25 necessary to renovate the effluent further, beyond
26 the federal facility numbers that are at the
27 discharge, and it will provide further renovation
28 before it actually enters the Dezadeash. So we

1 still see that as a necessary requirement in the
2 environmental assessment.

3 The second point I wanted to
4 discuss out of the environmental assessment relates
5 to the need for well number 5. And the screening
6 report, Exhibit 9.1, identifies some potential
7 effects of the project on groundwater. And those
8 are related to the Village's current use of the
9 single well number 3 as its supply. The Village
10 has recognized, for quite some time, that well
11 number 3 can't sustain production to meet the
12 Village's needs, and that was talked about a bit
13 this morning.

14 A bit of background on that...
15 the problem with not being able to meet the
16 Village's demand was first identified in 1988. The
17 well was drilled in 1980, and the water level, as
18 they mentioned this morning, was artesian; it was
19 above the ground level. By 1988, the water level
20 was somewhere around 13.5 metres below the top of
21 the casing. And that was a non-pumping water
22 level.

23 Mr. Farynowski mentioned some
24 levels this morning, and I presume those were water
25 levels while pumping.

26 So, after drilling well number
27 4, monitoring didn't take place until '97, by which
28 time the water level had recovered to somewhere

1 above ground level again.

2 The most recent estimates
3 suggest that the sustainable yield of the well
4 number 3 aquifer is -- the most recent report said
5 between 52,000 and 104,000 metres cubed per year.
6 Jeff mentioned, this morning, somewhere around
7 100,000; it appears that may be in the range of the
8 right number.

9 The late '80s, the use rates in
10 the range of 100,000 were clearly not quite
11 sustainable. It was drawing the well down.
12 Current use rates, as we talked about, are in the
13 range of a hundred and ten to 120,000 cubic metres
14 per year, which is in excess of the sustainable
15 capacity of well number 3.

16 And well number 4, I think you
17 mentioned this morning, it's been out of operation
18 since November; is that right?

19 The failure of well number 4
20 obviously came up at the end of the environmental
21 assessment. And as responsible authorities, we
22 recognized that it needed to be addressed. And
23 there were two ways to reduce the demand on well
24 number 3. One was reduce demand. The second was
25 the addition of another supply.

26 The reduced demand sounds like
27 a great idea, except that the Village still relies
28 only on a single well in that case, and I think the

1 failure of well number 3's pump, earlier this year,
2 demonstrates that, really, having an alternate
3 supply is pretty important.

4 So, from the EA perspective, it
5 was felt that the addition of another supply was
6 probably the most effective mitigation mechanism
7 for addressing that potential effect on the
8 groundwater regime.

9 DIAND recognizes that well
10 number 5 was not proposed in the application, and
11 we recognize that the Board may not be able to
12 address this in this licence renewal. I can't
13 speak for how that might impact your decisions.
14 The proposed well number 5 remains important for
15 Haines Junction's needs, and for mitigating the
16 potential effects on groundwater, as identified in
17 the screening report. If the Board can't address
18 this aspect in this application, then, from our
19 perspective, it can be addressed by a future
20 application, that will not require any further
21 environmental assessment, as long as the new well
22 is consistent with the description of well number
23 5, that was described during the environmental
24 assessment. So that will eliminate the need to put
25 that through a further EA. That should speed up
26 the process, for an amendment, substantially, if
27 that were necessary.

28 So that concludes our

1 discussion of the environmental assessment. The
2 remainder of it is pretty self-explanatory. And
3 we'd certainly be happy to answer any questions.

4 One thing I should mention, in
5 relation to the preliminary draft licence, the
6 monitoring table -- in condition 25, there's a
7 monitoring table, which identifies water surface
8 elevation for the two wells. That needs to be
9 monitored, there's no question. The Village's
10 consultants identified that as a need, as well.
11 The licence should probably specify that that
12 should be done as a static water level or as a
13 pumped water level. Probably static is the most
14 reasonable, but I would say it's probably wise to
15 seek some advice from somebody with some
16 hydrogeological expertise, to determine what would
17 be the most appropriate there. But it needs to be
18 specified, one or the other. And I'll pass it back
19 to Mr. Sherstone. Thank you.

20 MR. GRAINGER: Before you carry on, Dave, I
21 wonder if it would be appropriate for us to take a
22 10 minute break. And we'll do that now.

23 (Proceedings adjourned)

24 (Proceedings reconvened)

25 MR. GRAINGER: Okay, we'll get under way
26 again. Mr. Sherstone, you were going to continue
27 your presentation.

28 MR. SHERSTONE: Thank you, Mr. Chairman. I'd

1 like, if I can, to wade into the discussion on well
2 number 5, before I continue with my, sort of,
3 prepared notes. It's a bit ironic, because I think
4 I'm going to argue the exact same point that we
5 objected to when this policy of the Board came
6 forward, about dealing only with what's in the
7 application, was formulated.

8 For those members that were
9 around at that time, they'll recall that it was a
10 hearing of Viceroy Resources, in which the
11 applicant protested DIAND's efforts to bring new --
12 as they considered it, new points in for
13 consideration of the Board. And we had asked the
14 Board to include some material that had not been
15 part of the application. The Board deliberated
16 and, as we understand it, came up with the existing
17 policy; they can only address what's before it.

18 However, I think, in this
19 particular case, DIAND would suggest there may be
20 mitigating factors which the Board would perhaps
21 like to look at in deciding whether or not well
22 number 5 should be in.

23 First of all, there has been a
24 long delay, between the time of the application and
25 the actual hearing, and likely the issuance of a
26 licence. I think we have to recognize that events
27 have changed quite substantially, for Haines
28 Junction, in that time. Certainly, we recognize

1 that a lot of that delay was due to the sort of
2 complexities of the CEAA screening. To a large
3 extent, or to a satisfactory extent, the Village of
4 Haines Junction has exhibited due diligence in the
5 interim, and that there may very well be an
6 argument, therefore, that it should be examined.

7 It was examined under the CEAA
8 screening, and we believe the CEAA screening,
9 because it has examined it, gives the Board
10 certainly the authority to proceed with dealing
11 with that in the licence. And, of course, I think,
12 in a reading of the Waters Act, it would suggest
13 that the Board could include any term or condition
14 it wishes in a licence. So I would trust that that
15 would give the Board comfort, and perhaps might get
16 some sort of ability to look at whether well number
17 5 should be addressed, regardless of the fact that
18 it's not been included in the application, per se.

19 I'd like to look, then,
20 specifically at some draft licence clauses, if I
21 could, and raise some of the issues that DIAND has.
22 And the first one, if I can turn to, and it's a
23 generic one, although the example's very specific
24 to this particular licence as well, is clause
25 number 11. And, particularly, I'd like to refer to
26 the last paragraph of clause number 11.

27 And the beginning of that last
28 paragraph reads: As proposed in water licence

1 application MN99-027, in Water Resources'
2 experience, this does not necessarily obligate the
3 licensee to follow the plan set out in the
4 application, only to proceed in the general
5 direction described in the supporting
6 documentation.

7 We based that on experience we
8 had with a recent enforcement action, in which, in
9 the face of a deliberate violation of an
10 inspector's stop work order, we proceeded with a
11 legal brief to Justice Canada. And when we met
12 with the defence counsel, he seized upon the fact
13 that that particular licence said, you build it and
14 operate it as outlined in your licence application.
15 The argument being that the applicant was not duty
16 bound to follow what was prescribed in the licence,
17 or set out -- you know, a reference, basically, do
18 it according to these diagrams or documents.

19 That was considered an
20 exemption and, in fact, in the face of that,
21 Justice Canada advised us they could not proceed.
22 So, essentially, we had to allow work to go
23 according to the applicant's wishes.

24 So Water Resources believes
25 that words such as "set out in", "as documented
26 in", or phrasing, for example, "and the licensee is
27 to construct and operate the facility or system
28 only in accordance with the documentation provided

1 with this application...." In other words, as
2 enforcement people, and particularly for our
3 inspectors in the field, we're seeking something a
4 little stronger, something a little clearer, so
5 that the applicant understands, or the licensee
6 understands, that he or she must build it, must
7 operate it, in according to the wishes of the
8 Board, and according to the documentation they
9 provided.

10 I'd like to turn, if I can,
11 now, a bit perhaps out of sequence, to clause 4,
12 which the Village of Haines Junction referenced;
13 and that's the --

14 MR. GRAINGER: Could I just, again, ask you to
15 slow down a little bit.

16 MR. SHERSTONE: Sorry.

17 MR. GRAINGER: Just because our court reporter
18 has difficulty keeping up with you guys sometimes.

19 MR. SHERSTONE: I apologize, it's a chronic
20 problem I have, I realize, but....

21 Clause 4 deals with the other
22 water use and waste deposit. In our view, clause 4
23 gives the licensee the ability to use additional
24 water, and deposit additional waste, without the
25 need for a licence amendment, provided that such
26 use would normally be allowed in column 2, schedule
27 8, of the water regulations. And this approach
28 poses two difficulties for Water Resources.

1 Firstly, it appears at variance
2 with the requirements of section 8, licensing
3 criteria, of the Yukon Waters Regulations; and
4 secondly, it poses significant pragmatic
5 difficulties, enforcement difficulties, for the
6 inspectors in the field.

7 Section 8 of the regulations
8 states that, subject to subsection 2, a licence
9 issued under subsection 14(1) of the Waters Act,
10 which is how -- this simply states how the Board is
11 to issue licences -- shall be a type B for one or
12 more uses of water, set out in column 1, which is
13 the one that normally doesn't require a licence,
14 where any one of those uses or deposits meets the
15 criterion set out in column 3, meets the criterion
16 set out in column 2.

17 And for type A licences, this
18 is very similar wording. It simply says that the
19 licence is required for one or more uses of water
20 or deposits of a waste set out in column 1 of any
21 schedule 5 through 10, where any one of those uses
22 or deposits meets the criterion set out in column
23 4.

24 If you look at section 8(1),
25 it's important to note that it only refers to the
26 paragraphs given exemption, 5(1)(a) and 5(1)(b) of
27 the regulations. This applies only to type B
28 applications. And I'll return to the general

1 application and, sort of, enforcement difficulties,
2 in a moment.

3 Paragraph 5(1)(c) of the
4 regulations does provide an exemption from
5 licensing, but only, in Water Resources' view,
6 where none of the other uses is being licensed.

7 In the present case, the
8 Village of Haines Junction is seeking a type A
9 licence. Paragraph 8(2) of the regulations states,
10 in effect, that any and all uses of water, where
11 any one use or deposit requires a licence, must be
12 licensed in a type A licence.

13 In the preliminary licence,
14 clause 4 says, subsequent to or after the Board has
15 issued a licence, the licensee may proceed, on his
16 or her own volition, to increase water use, and
17 deposit additional or new types of waste, without a
18 licence. Water Resources believes this clause
19 provides authorization for water use and waste
20 deposit which were not contemplated in the drafting
21 of the Act or its regulations.

22 The inclusion of such a clause,
23 in both type A and type B licences, also causes
24 significant difficulties for inspectors, in
25 carrying out the compliance and enforcement
26 requirements of the Act. In the present case, it's
27 hard to imagine what additional works the Village
28 of Haines Junction might do, that would not be

1 directly related to the appurtenant works or
2 undertakings associated with the issuance of the
3 type A licence. Yet it would appear that an
4 additional direct water use, of less than 100 cubic
5 metres a day, is authorized by clause 4.

6 An inspector might, therefore,
7 be faced with evidence of one or more uses of less
8 than 100 cubic metres a day. In the hypothetical
9 worst case scenario, several discrete uses of 99
10 cubic metres of water per day could be allowed, and
11 would soon exceed the maximum withdrawal set out in
12 the Board's type A licence.

13 However, should this work or
14 water use appear and the waste deposit occur after
15 the licence has been issued, the Board appears to
16 have given the licensee carte blanche to do such
17 work, and the inspector is, thus, powerless to
18 direct the licensee to obtain an amendment.

19 Similarly, if someone were to
20 construct a number of diversions less than two
21 metres wide, even though the total would amount to,
22 sort of, substantially higher volumes than
23 contemplated in column 1, this would also appear to
24 be allowed.

25 The question that the inspector
26 faces is, would the establishment of a separate
27 system for waste disposal, in a new subdivision in
28 Haines Junction, which is planned -- is that going

1 to be excluded from the water licence, where they
2 need to get an amendment? For example, if there
3 are other water or sewer facilities in the same or
4 adjacent area, do they need to be licensed? It
5 would appear that the argument could be made that
6 they do not.

7 I'd like to move, if I can, to
8 clause 7, "Compliance With YTG Acts and
9 Regulations". This clause essentially obligates
10 the licensee to comply with the requirements of the
11 Yukon Government's Public Health and Safety Act.
12 The licence also contains the Board's standard
13 clause 5, it's a boilerplate legal statement, which
14 normally appears in all Board licences. And that
15 clause states "No term of this licence limits the
16 application of any other federal, territorial or
17 First Nation law."

18 Water Resources, therefore,
19 concludes that the Board has taken an extra, or
20 special, precaution to insure that the YTG Acts, on
21 drinking water quality, are obeyed.

22 In the normal course of
23 inspection, in carrying out our responsibilities
24 under the Yukon Waters Act, an inspector would take
25 the necessary steps to insure compliance with all
26 the terms and conditions of a licence. That's his
27 responsibility. To fail to do so means dereliction
28 of duty.

1 However, the enforcement of
2 Acts and regulations of another government are
3 beyond the powers granted to an inspector under the
4 Waters Act. The power to set such terms may, in
5 fact, be outside the strict powers of the Water
6 Board.

7 DIAND has sought legal advice
8 from Justice Canada, on the matter of enforcing
9 clause 7. And basically, if I can just condense it
10 down, the Justice opinion is that sections 37 and
11 39, which describe the powers of inspectors,
12 restrict those authorities to the specific
13 legislation and corresponding regulations; in other
14 words, the Yukon Waters Act. DIAND Water Resources
15 inspectors would have to be designated as
16 enforcement officials under the requisite YTG Acts
17 and regulations, before they can enforce any
18 portion of such instruments.

19 DIAND does not, therefore, have
20 the ability or the jurisdiction to enforce YTG
21 health regulations, or the directions or orders of
22 the YTG medical officer of health or health
23 officers.

24 Nevertheless, Justice has also
25 informed us that the presence of clause 7 may be
26 placing a special obligation on DIAND inspectors,
27 to monitor the situation and report any danger to
28 persons, property or the environment, to the

1 relevant authorities as quickly as reasonably
2 possible. Such an expectation, while exposing
3 DIAND and the inspectors to the charge of
4 negligence if such monitoring and reporting is not
5 done in a reasonable and timely manner, is likely
6 not possible.

7 The reason, and it's
8 particularly applicable to this situation, is, at
9 present, Water Resources understands that the YTG
10 policy, on orders to communities and others, to be
11 of the nature of private correspondence between YTG
12 Environmental Health, the medical officer of
13 health, and the recipient. Should the recipient
14 choose not to reveal the receipt of such
15 correspondence, DIAND inspectors have no way of
16 knowing that monitoring, or any corrective action,
17 is required.

18 In a recent instance, involving
19 another municipality, DIAND understands that a
20 letter from YTG Health, detailing a monitoring
21 program for drinking water, was sent to the
22 municipality in late January 2001. Yet, at a
23 meeting between officials of the municipality, YTG
24 Environmental Health, and DIAND Water Resources, on
25 April 20th, almost three months later, the
26 officials responsible for the operation of the
27 water and sewer system were unaware of such a
28 directive.

1 DIAND's legal opinion is that,
2 in these situations, the responsibility for
3 insuring water quality and public safety rests with
4 the recipient of the communications and the YTG.
5 In fact, in such cases, DIAND Water Resources will
6 not have any possibility of insuring the terms of
7 clause 7 are carried out.

8 DIAND believes, therefore, that
9 the inclusion of clause 7, in water licences, may
10 raise false expectations among the public, that
11 adequate oversight of drinking water quality is in
12 place. Should that not prove to be the case, the
13 certainty of blame being falling on DIAND, its
14 inspectors and the Water Board, is almost certain.
15 But there's no realistic means, for either the
16 Board or DIAND, to insure that the requirements of
17 clause 7 are being met.

18 DIAND Water Resources requests
19 that clause 7 be deleted from the Haines Junction
20 and all future licences, in the absence of specific
21 water quality standards, drinking water quality
22 standards, which can be enforced clearly by DIAND
23 inspectors under the Yukon Waters Act.

24 I'm going to return, now, to
25 the DIAND concerns about drinking water quality.

26 As noted in Mr. Slater's
27 presentation, the CEAA review forces this
28 department to address all potential environmental

1 concerns and possible impacts. Certainly, in the
2 current climate of uncertainty over drinking water
3 quality in Canada, any CEEA screening must address
4 possible impacts of untreated or poorly treated
5 drinking water.

6 In part, the potential impacts
7 and mitigation measures derive from the results of
8 DIAND inspection audits of drinking water supplies,
9 and the licence-required self-reporting by
10 licensees. In the absence of required reporting,
11 and the availability of that information to DIAND
12 inspectors, the assessment of drinking water
13 quality becomes more difficult. In cases where the
14 medical officer of health may issue an order, there
15 may not be a long term database which can determine
16 the initiation of events which led to the order;
17 nor sufficiently long and consistent enough record
18 to determine trends.

19 While DIAND recognizes the
20 clear mandate of YTG Environmental Health in this
21 area, there remains the uncertain question of
22 DIAND's fiduciary obligation to the residents of
23 the Yukon, and especially the First Nations. On
24 this matter, the legal situation is unclear. Many
25 communities in the Yukon, however, are
26 predominantly First Nations.

27 In the unique case of
28 Whitehorse, if I can use that as an example,

1 drinking water to the Kwanlin Dun First Nation is
2 supplied by the City, to the First Nation, through
3 a contractual arrangement. It's not certain that
4 the contractual arrangement, between the City and
5 Kwanlin Dun, given the DIAND and funding involved,
6 completely absolves this department of all
7 responsibility for insuring adequate drinking water
8 quality. And this matter is currently being
9 examined by Indian and Inuit Affairs Branch of the
10 Department. A current court case, in Ontario,
11 suggests that DIAND will certainly be a defendant
12 in any cases of federal financial or administrative
13 involvement in First Nation drinking water and
14 sewage treatment system failures. A demonstration
15 of due diligence will be critical to DIAND being
16 able to show that it has met its obligations.

17 In reviewing this sort of
18 matter, DIAND suggests it may have been
19 advantageous for the Board to have signalled, in
20 advance, its intention to remove drinking water
21 standards from municipal licences. Because this
22 deletion in the Dawson water licence was
23 inadvertently overlooked by the regulatory agents,
24 its disappearance from the Mayo municipal licence,
25 and subsequently from those of Faro, Teslin and
26 Carcross, took many of us by surprise.

27 As a result, neither DIAND, nor
28 the YTG bodies responsible for drinking water, were

1 able to put in place the necessary regulations,
2 protocols or agreements, which would have seen a
3 smooth transition from the Yukon Waters Act, Yukon
4 Territory Water Board regime, to a wholly YTG
5 system. And I think we've heard, today, that while
6 YTG is moving towards policy development, there's
7 certainly a vacuum in terms of what is actually
8 going to happen and who's going to actually oversee
9 and insure drinking water quality, particularly in
10 First Nation communities, as these licences come up
11 for renewal; or even, in fact, given the Whitehorse
12 situation, or given what may be going on in these
13 communities which are already under the medical
14 officer's orders, what is happening to water
15 quality.

16 Based on the above DIAND
17 concerns with First Nation drinking water quality,
18 and the lack of certain regulatory processes within
19 the Yukon for drinking water, and dependent upon
20 the outcome of discussions at this hearing, Water
21 Resources recommends to the Board that it consider
22 incorporating drinking water standards into the
23 current Haines Junction water licence, and
24 providing a specified transition period during
25 which DIAND can more clearly determine its
26 fiduciary obligations and monitor drinking water
27 quality.

28 Concurrently, it's expected

1 that the YTG would be provided with a time to put
2 in place the necessary regulatory and enforcement
3 mechanisms, to insure the Yukon public of safe
4 drinking water.

5 I'm going to turn it back, now,
6 to Mr. Slater, to a discussion of some of the
7 exhibits he put, in terms of the larger national
8 issues on water quality, and the possible federal
9 responsibilities.

10 MR. SLATER: Thank you, Mr. Sherstone. I'm
11 going to talk a little bit about the two exhibits,
12 8.3 and 8.4, that we submitted this morning. One
13 of them, 8.4, which is the Sierra Legal Defence
14 Fund report card, I've discussed a little bit
15 already. That report card, produced in January
16 2001, evaluated Canada's drinking water regulatory
17 regimes. It didn't evaluate the actual quality of
18 the water here, and we're certainly not questioning
19 the quality of the water supply in Haines Junction.

20 The intent of that report was
21 to evaluate how effective each province and
22 territory's regulatory regimes are, in four areas
23 that the report called "barriers".

24 The first was protection of
25 sources. Primarily, they were looking at
26 protection of watersheds for surface water
27 supplies. The City of Vancouver, for instance, has
28 a surface water supply which is in a protected

1 watershed where there's very limited activity
2 allowed.

3 The second barrier discussed is
4 water treatment. For example, chlorination,
5 filtration and training of operators, those kind of
6 things.

7 The third barrier discussed is
8 clean distribution systems. And that relates to
9 design, construction and operation of the
10 distribution system, and evaluated through --
11 primarily through residual chlorine monitoring.

12 The fourth barrier they discuss
13 is comprehensive testing, which includes monitoring
14 and reporting requirements, and planned contingency
15 actions for when there are exceedences of
16 standards.

17 The report also discusses the
18 need for standards that can be applied to drinking
19 water. And, currently, in the Yukon, as we talked
20 about this morning, there are guidelines; the
21 Guidelines for Canadian Drinking Water Quality.
22 Those were prepared by the Federal/Provincial
23 Subcommittee on Drinking Water, of the
24 Federal/Provincial Committee on Environmental and
25 Occupational Health. It's a heck of a name for a
26 committee.

27 MR. GRAINGER: Bill, can you slow right down?

28 MR. SLATER: Slow down.

1 MR. GRAINGER: Because you're reading from
2 prepared text, and --

3 MR. SLATER: Sure, I'll try.

4 MR. GRAINGER: I'm not sure we're going to get
5 all this, so please --

6 MR. SLATER: Do you want the name of that
7 again? The Federal/Provincial Subcommittee on
8 Drinking Water, of the Federal/Provincial Committee
9 on Environmental and Occupational Health.

10 As we talked about this
11 morning, it's our understanding that Environmental
12 Health Services, as a policy, applies those
13 guidelines as a standard.

14 When the Sierra Legal Defence
15 Fund completed its evaluation of each
16 jurisdiction's ability to regulate in those four
17 areas, it considered a hierarchy of regulatory
18 instruments, in which it considered requirements in
19 legislation and regulation as the most effective;
20 followed by enforceable permit requirements;
21 followed by policies and guidelines. And I think
22 this comes back to Lynn's response to one of my
23 questions earlier on. And that is that the actual
24 practice -- when I asked her whether she felt it
25 was a fair evaluation of Yukon conditions, she said
26 no. And her response was that it didn't fairly
27 evaluate the actual practice; it only evaluated
28 what the regulatory regime had established in

1 regulation. And I believe that's, to a certain
2 extent, true. The actual practice of what's being
3 done is somewhat different. But it relies, to a
4 large extent, on policy and guidelines.

5 As I mentioned earlier, Yukon's
6 rating in the report card was slightly lower than
7 Ontario's rating, when Ontario was evaluated on the
8 basis of pre-Walkerton conditions. Ontario's
9 rating has now been revised, and the primary
10 weakness identified there, now, is a lack of
11 statutory requirement for watershed protection.
12 Nobody in Canada really has the ability, the
13 regulatory ability, to protect watersheds, or
14 regulatory requirement to do so.

15 Ontario's new regime
16 establishes clear requirements for water treatment,
17 whereby groundwater sources must be treated through
18 disinfection, like chlorination. Surface water
19 sources must be treated through disinfection and
20 chemically assisted filtration.

21 It also establishes stringent
22 training, monitoring, reporting and response
23 requirements. These are all established in the new
24 Drinking Water Protection Regulations that were
25 made under the Ontario Water Resources Act.

26 Exhibit 8.3, that we submitted
27 this morning, is schedule 2 from those regulations.
28 The title page on that is actually the title page

1 from the entire regulations, but all we've
2 submitted as an exhibit is schedule 2. Schedule 2
3 lays out the monitoring requirements that are
4 established in those regulations.

5 We've brought it forward only
6 as an example for what other jurisdictions are
7 looking at. Just to give some examples out of
8 that, the microbiological monitoring requirements
9 would require eight samples for a groundwater
10 source, for faecal and total coliforms, per month.
11 In addition, there would be weekly samples, and
12 those would be taken in the distribution system, as
13 opposed to from the supply. In addition, there
14 would be some weekly samples from where the treated
15 water enters the supply, and also from the actual
16 source prior to treatment. There's also some
17 requirements for chlorine residual sampling within
18 the distribution system.

19 I've raised the Ontario example
20 here because they have, as we all know, recently
21 have been faced with a crisis in their regulatory
22 regime, surrounding drinking water. They have
23 substantially more resources at their disposal, for
24 developing an effective regulatory regime, than we
25 can ever hope to have here in the Yukon. And I
26 think it would be prudent for us to learn from
27 Ontario, so that we prevent the types of incidents
28 that Ontario has now realized it must prevent. And

1 they're trying to do so with their new regulations.

2 The Ontario example also has
3 some additional relevance, I think, here. Because,
4 like several other provinces, it utilizes its water
5 resource management legislation, the Ontario Water
6 Resources Act, which is under the Department of
7 Environment, to establish standards and treatment
8 monitoring reporting and response requirements,
9 that provide clear feedback loops to public health
10 agencies.

11 Like Yukon, the municipalities
12 can't utilize the water without a permit under the
13 Water Resources Act in Ontario. And Ontario has
14 decided that these permits offer an effective
15 mechanism for establishing requirements and
16 carrying out compliance and enforcement activities.
17 This is fairly similar, in my opinion, to the past
18 requirements for monitoring that were contained in
19 water licences.

20 Now, I'm not suggesting, here,
21 that those should necessarily be carried on
22 forever. The concept of some type of drinking
23 water regulation, under the Yukon Public Health and
24 Safety Act, is probably a good one, and it's
25 probably the best long term solution for drinking
26 water protection in Yukon. It's not, however,
27 immediately available.

28 In the absence of another

1 effective regulatory regime, it seems prudent to
2 utilize the best one we have; and that's probably
3 licences under the Waters Act.

4 As Dave mentioned earlier, the
5 letters do provide some guidance on what needs to
6 be done. Unfortunately, when the operators go out
7 to run their systems, the document they pick up is
8 the water licence. What are we required to do in
9 running this system? They look to the water
10 licence. They don't look in the filing cabinet for
11 a single page letter. They know they need to have
12 a water licence. You can't operate the system
13 without one. And so, putting it in a water licence
14 gives you something that is much more attainable
15 for the actual operators.

16 So, we're still of the opinion
17 that those requirements should be in the licence,
18 as Dave mentioned earlier. And in doing this, I
19 think we need to be certain that we're looking
20 carefully at all aspects of insuring a safe water
21 supply. And that may require some additional
22 conditions related to drinking water, more than
23 those which were contained in earlier licences.
24 And especially in relation to those five areas that
25 I mentioned earlier today, when I was asking
26 questions of Lynn: water treatment; drinking water
27 standards; monitoring; reporting; and response.
28 Those five areas.

1 Now, whether they all need to
2 be addressed in licences, I'm not sure, but we
3 certainly should think about it. And I think, if
4 we do take that approach, we do need to make sure
5 that the licence establishes a direct link back to
6 Environmental Health Service, who we all, I think,
7 acknowledge has the primary responsibility for
8 making sure that we do have safe drinking water
9 supplies.

10 Thank you. I'm going to pass
11 it back to Dave.

12 MR. SHERSTONE: Thanks, Bill. Just to wrap up,
13 Mr. Chairman, DIAND's position, aside from the
14 specifics contained in its intervention and the
15 CEAA screening. DIAND believes that, currently,
16 there is a gap in the regulatory mechanism, which
17 is not insuring drinking water quality. We believe
18 there are larger issues, of First Nation Issues and
19 drinking water quality in the Yukon, which need to
20 be addressed. There is still some federal residual
21 responsibility. We've asked Justice Canada, or
22 we're asking Justice Canada, to look into that, to
23 define it a bit better.

24 For the present, we would urge
25 the Board, or encourage the Board, to incorporate
26 drinking water quality standards into this current
27 licence, or into any which come in the near future.
28 We'd also encourage the Board to set time lines for

1 MR. SHERSTONE: I believe they are, Lynn, but
2 we'll just double check.

3 MR. SLATER: The requirements that are
4 currently in the preliminary draft licence, there
5 are no water quality monitoring requirements, for
6 drinking water quality, in the preliminary draft.
7 There were some in the previous licence.

8 MS. RICHARDS: So, are you proposing -- what,
9 then, are you proposing to actually go into the
10 draft? Are you saying that the ones that are in
11 the previous licence are going to be flipped over
12 to this licence; or are you going to do research
13 and analysis to determine the specific requirements
14 for the Village of Haines Junction?

15 MR. SLATER: Our intervention actually
16 proposes that the existing requirements be retained
17 in the licence -- the requirements from the
18 previous licence be rolled forward into this
19 licence.

20 MS. RICHARDS: I have a quick clarification
21 from Village of Haines Junction. Do you inject
22 fluoride into your water supply?

23 MR. FARYNOWSKI: No.

24 MS. RICHARDS: My question is, why, then -- if
25 you look at Ontario's, the only reason why they
26 request a daily or weekly monitoring of fluoride,
27 is where you're injecting fluoride into the system.
28 You have, within the old requirements, then, asking

1 for fluoride to be sampled every two weeks. Is
2 there a particular reason for this?

3 MR. SLATER: Good question. We haven't
4 addressed that issue in our intervention. I would
5 guess that the fluoride was identified as a
6 requirement in the old licence because there was a
7 time when Haines Junction did inject fluoride. Is
8 that the case?

9 MR. FARYNOWSKI: No, we don't, and never have.

10 MR. SLATER: If it is not being injected,
11 there isn't a need to monitor it.

12 MS. RICHARDS: Keeping with the same line of
13 thought, if you are applying this monitoring
14 program within the licence, is it flexible enough,
15 within the 20 years -- when the updates of the
16 Guidelines for Canadian Drinking Quality are
17 ongoing scientifically, if new parameters or new
18 conditions, or changes in conditions, with the
19 Village of Haines Junction, occur, can you make
20 those changes within a 20-year water licence, to
21 reflect current information that may need to be
22 required over and above things that were existing
23 today or, in this case, I'm not sure when this
24 licence was, 10 years ago?

25 MR. SHERSTONE: To answer your question, DIAND
26 certainly has no flexibility to do that, Lynn.
27 That's the mandate of the Board. Where I'm
28 seeking, sort of, certainty, is so, when an

1 inspector goes out, he knows, and this is what Bill
2 said, so the operator knows what he's supposed to
3 look for, what he's forced to sample for, and what
4 he's supposed to report.

5 Now, of course we can't predict
6 what's happening. But, on the other hand, without
7 that, there is no regulatory mechanism, there is no
8 monitoring mechanism, that certainly DIAND can
9 apply, or the Waters inspectors can apply. So I
10 think we'd have to address future changes to the
11 Board, not to DIAND.

12 MS. RICHARDS: Given that your inspectors are
13 doing enforcement, based on the application, when
14 these kinds of things happen, will they be forced
15 to enforce things like, you know, sampling fluoride
16 every two weeks, even though, in science, it's
17 totally irrelevant?

18 MR. SHERSTONE: Well, I think Mr. Slater
19 suggested, and I think the Board will probably take
20 it under advisement that, if there's no need for
21 fluoride, it wouldn't be there. Any other
22 parameter that's in there, the inspector's job is
23 to go and make sure that what the village or
24 municipality is supposed to do, at what frequency
25 and what reporting, he would do. It's not their
26 job to interpret the validity of it, or to
27 determine whether, you know, we can look the other
28 way. We don't have that flexibility. It's simply

1 a mechanism for the inspector to know what he's
2 doing, and to what standard it has to be done.

3 MS. RICHARDS: I have another question. Does
4 this previous licence monitoring program reflect
5 the sample stations that may change within the
6 distribution system, or even reflect -- I don't --
7 I'm just looking at it, I'm not sure that I read it
8 that -- You mention the requirements about end
9 sampling points, and sampling within the
10 distribution system, those kinds of features. And
11 you've got station numbers down here. And the
12 thing is, if the Village grows, and you have other
13 sampling sites, what is the mechanism to have those
14 inclusive within the licence, for your inspectors
15 to enforce?

16 MR. SHERSTONE: In our view, it would require
17 an amendment to the water licence.

18 MS. RICHARDS: Would you think it's fair to
19 say that there is a need for, you know,
20 Environmental Health, with the flexibility and the
21 knowledge of the changing scientific requirements
22 and conditions that are ongoing, that they would --
23 even if you put something in the water licence,
24 they would have to have a very significant role in
25 the water quality; would it be fair to say that,
26 given that this is going to be a 20-year licence?
27 Or, potentially.

28 MR. SHERSTONE: I'm not sure I follow your

1 question, Lynn. But I think one of the
2 difficulties we have, as DIAND and Water Resources,
3 is that there is a fundamental difference in the
4 way we perhaps view this, and the way we believe it
5 could be enforced. What I see the DIAND role being
6 concerned with is what comes out of the tap. I
7 mean, we recognize that's your area but, I mean,
8 what can we test, is what comes out of the tap and
9 what standards does it meet.

10 I know, in discussions with
11 Environmental Health, the way that -- my
12 understanding of the way Environmental Health looks
13 at it, is the number of disease outbreaks. And if
14 you have a large outbreak, a number of diseases,
15 you've got a water quality problem. And that's,
16 you know, perhaps a valid way for you people to
17 look at it.

18 But when you're dealing with
19 drinking water systems, and operations, and you're
20 trying to do QA/QC on these problems, that really
21 isn't a very helpful way for an inspector to try
22 and discharge his responsibilities, assuming he has
23 them in those areas. He needs to be able to go and
24 say, This is coming out of the tap, this is what
25 people are drinking, these are the standards; does
26 it meet it, yes or no.

27 So I appreciate, sort of, the
28 direction you're going in terms of impact, but I

1 think when you're trying to, sort of, assure --
2 we're trying to assure ourselves that what is
3 coming out of the tap is drinking water quality,
4 requires a set of standards and a set of sampling
5 frequencies, in a way of sort of measuring it and
6 monitoring and plotting the trends, so that we can
7 discharge our responsibilities in those areas,
8 jointly or severally.

9 MS. RICHARDS: That is one aspect of the
10 evaluation, Mr. Sherstone. I'm suggesting, given
11 my previous presentation, that's certainly not the
12 only criteria that we're looking at, within the
13 drinking water regulations, is incidence of
14 outbreaks of disease. I just wanted clarification
15 on that.

16 I don't have any further
17 questions, thank you.

18 MR. GRAINGER: Thank you, Ms. Richards. Any
19 questions from Environment Canada?

20 MR. ENNS: No questions, thank you.

21 MR. GRAINGER: Okay, from the applicant, the
22 Village of Haines Junction, to DIAND/Parks Canada?

23 MR. FARYNOWSKI: It seems that we're kind of
24 getting stuck in the middle of a jurisdictional
25 thing. And the reality is that, whatever is in the
26 water licence, if YTG puts something over and above
27 that, in the direct form of a letter, such as
28 Exhibit 8.2, we, as a municipality, have to follow

1 that as well. So you could say it's double
2 protection; it's put in twice.

3 And because there's two
4 agencies that are monitoring us, and I think what
5 we said earlier, in our application, was, whoever
6 wants copies of these things, we'll send them; to
7 four people, if that's what they want.

8 Talking about the 20-year
9 licence... if things change, I think there is a
10 process in the licensing, that they can change some
11 of their required testing; it may take time. But
12 by the same token, if YTG comes to us and says we
13 want way more than what's in the licence, we still
14 have to do it.

15 So, it just seems like we're --
16 this application is stuck in a jurisdictional
17 battle, and I don't know why we're becoming part of
18 it. I think it's something that the three, the
19 Water Board and the other jurisdictions, have to
20 resolve. Whether there's a clause in the licence
21 or not doesn't really affect what we're going to
22 have to do to have safe water. Somebody is going
23 to come up with a regulation, and we're going to
24 follow it.

25 And, for instance, when we got
26 this letter, we started following it. That didn't
27 make us stop doing what was in the licence; we
28 still did that as well.

1 MR. GRAINGER: Okay. Thank you, Mr.
2 Farynowski. Do you have any specific questions
3 directed at Parks Canada/DIAND?

4 MR. FARYNOWSKI: No.

5 MR. GRAINGER: Okay. Board members...
6 starting with Mike Johnson.

7 **DIAND/PARKS CANADA QUESTIONED BY THE BOARD**

8 MR. JOHNSON: My question is to Parks Canada.
9 And I refer to the memorandum. Is it Parks
10 Canada's view that this memorandum commits them to
11 communicating and cooperating and coming up with
12 perhaps a large financial resource, if there's an
13 upgrade required?

14 MR. BRENEMAN: It is our view we're going to
15 work together with a partner, and the Village of
16 Haines Junction is our partner. But we can't
17 specify dollar amounts or any of those exact
18 details.

19 MR. JOHNSON: No more questions.

20 MR. GRAINGER: Oliver?

21 MR. JIM: No comments.

22 MR. GRAINGER: Dianna? Bruce?

23 MR. CHAMBERS: No.

24 MR. GRAINGER: I have a couple. I guess some
25 of these are directed to Mr. Breneman. In 1990,
26 when this facility was licensed the last time, the
27 wetlands treatment component of the system was

1 discussed, it was studied, there was a lot of
2 information in the original licence application.
3 And the Parks Canada officials, at the time, seemed
4 to be okay with the idea of discharging the
5 secondary quality effluent, from that lagoon
6 system, into the park. Seemed to recognize the
7 value, seemed to be satisfied with the degree of
8 treatment that would be obtained in both the
9 facility and the wetland, and allowed the system to
10 be licensed, as contained in the previous licence.

11 My question is, what's changed?
12 What's the necessity to bring in the more stringent
13 requirements at the park boundary?

14 MR. BRENEMAN: It was either in 1989 or 1990,
15 the Acting Superintendent, Jim Lambe, met with the
16 Village of Haines Junction, in regards to the
17 requirements. And the effluent quality he had
18 asked for, at that time, was for the same thing
19 we're asking for now; the revised -- or, sorry, the
20 1976 federal effluent guidelines. What gave us a
21 lot of comfort, back then, was the quality of the
22 effluent that was already monitored in the last
23 lagoon.

24 Since then, we've also reviewed
25 our legal standing, with legal advice, and that's
26 what they've prompted us with, or advised us with.

27 MR. GRAINGER: Sorry, could you elaborate on
28 that? I'm trying to get a sense of, if it was okay

1 before, and nothing's changed, this is, you know,
2 in a way, a renewal of an existing system, what
3 legal considerations have made you ask for
4 something more stringent at the boundary?

5 MR. BRENEMAN: This time, we went out with a
6 greater understanding of, with the 20-year licence,
7 with knowing, in the past, the effluent quality in
8 the last lagoon, we had some concerns related about
9 the long term aspects of the effluent quality,
10 especially within the 20-year requirement. So we
11 looked into the potential of a licence of
12 occupation with the wetlands. We went to our legal
13 advisors, and they advised us that it probably
14 would not happen.

15 We looked at a 20-year
16 requirement, without getting a licence of
17 occupation for the wetlands. It's not within our
18 new National Parks Act; that has changed twice
19 since then. It's not within our new policy, that
20 has gone out for public input across Canada, and
21 that's what's prompted the change. As well as, we
22 did ask, in 1989, at a Village meeting, in regards
23 to having the effluent quality to be the same
24 standards as specified in the 1976 federal
25 guidelines.

26 MR. GRAINGER: Earlier, you had mentioned that
27 it was your view that an Order in Council would
28 have been necessary to allow the further use of the

1 wetlands as part of a tertiary treatment system. I
2 wonder if you could clarify why that would be
3 necessary? I mean, in terms of giving the land
4 over; or just the use of?

5 MR. BRENEMAN: The area is within the national
6 park; it cannot be given over, it has to be a lease
7 arrangement. My understanding, from our legal
8 counsel, is our minister does not have the
9 authority to enter into that agreement without
10 going to an order of a council; that the National
11 Parks Act does not give her that authority to enter
12 into a lease arrangement.

13 MR. GRAINGER: Thank you. The 1976 Federal
14 Facility Guidelines, are those a receiving water
15 standard -- or, sorry, a receiving water guideline?
16 The effluent has to be of that quality before it
17 can be put into a receiving environment, like a
18 stream or a lake, river?

19 MR. BRENEMAN: I'm not an authority on that,
20 and I'm not sure of that. But my understanding, it
21 was when it was -- my understanding, from our staff
22 in the south, is that when it was leaving the
23 facility. But perhaps DIAND can have a better
24 answer.

25 MR. SHERSTONE: Our understanding is that it's
26 at the point of discharge from the facility. Very
27 similar to the Fisheries Act. It's at end of pipe,
28 essentially.

1 MR. GRAINGER: Then, Mr. Sherstone, does it
2 matter where that effluent goes; whether it goes on
3 the land, goes into a wetland, or into a receiving
4 water?

5 MR. SHERSTONE: Mr. Chairman, if you're
6 speaking technically, if you're speaking in terms
7 of effluent remediation, the answer's probably no.
8 I think the point Mr. Breneman has made, is it's
9 simply not permitted by the legal instruments which
10 control Kluane National Park. In other words, it's
11 just a non-starter. There's no point in going
12 there, because his Acts and regulations prevent
13 even considering that.

14 MR. GRAINGER: What I'm trying to get at is
15 the justifiability of applying that standard as it
16 goes into the park. And if I understand your
17 information correctly, it doesn't matter where it
18 goes, it has to meet that, to come in; is that
19 correct?

20 MR. SHERSTONE: I think that's the essence of
21 it. I'm reminded of the discussion we had in
22 Dawson, where we were instructed by the consultant
23 for one of the proponents, that it was my task to
24 make sure the Fisheries Act was changed so that it
25 didn't apply. I think I'm hearing the same thing
26 here, and I guess as, sort of, minions in the
27 government system, we simply don't have the ability
28 to address that, and it's way outside our ability

1 to address. It's a senior policy and legal issue
2 for these departments.

3 MR. GRAINGER: So, are you telling us that
4 it's not just a feeling you have, that you want
5 this standard; you're telling us that it's
6 regulated by some law or regulation or policy?
7 Which one? In other words, you have no choice;
8 whatever comes across that boundary, regardless of
9 where it's going, must meet a guideline? Is that
10 what you're telling us?

11 MR. BRENEMAN: That's what we're looking for.
12 And national parks are going one step further in
13 other -- where it's leaving their facilities, in
14 other national parks, they're going to a much
15 higher standard. And we're saying, because we have
16 that wetland there, we're willing to accept the
17 lower effluent standard, and hope that that wetland
18 will provide renovation to that effluent before it
19 enters into the Dezadeash River.

20 MR. GRAINGER: Well, that's sort of where I'm
21 going with this. Because if you look at the
22 previous work that was done, there was, you know,
23 predictions of substantial effluent renovation that
24 would meet the guideline at the end of the wetland.
25 But I'm trying to determine, and if you can tell
26 us, you know, is it a desire, or is it a policy, a
27 regulation or a law, that whatever crosses that
28 park boundary must be of that quality or higher?

1 Help us with this.

2 I'm trying to grab on to why
3 the CEAA screening is so -- And you admit you took
4 the extra step, in putting specific standards into
5 a CEAA, which, you know, makes it difficult for us
6 to move anywhere else. Explain to me -- back to my
7 question -- is it a desire on your part, that you'd
8 like to see that, to give you a comfort level? Or
9 is it a regulation or a law or a policy? And if
10 it's any one of those, can you be specific as to
11 what you're referring to?

12 MR. BRENEMAN: Sure. First, it's a policy
13 matter in regards to pollution and maintaining the
14 ecological integrity of Kluane National Park.
15 Second, there is a regulation, under the National
16 Parks Act. It doesn't specify levels but it does
17 specify that any potential pollution source, that
18 can degrade the natural environment, at the opinion
19 of the superintendent, is not lawful, and that the
20 superintendent can take action to correct it, and
21 obtain costs from doing so, from the individual
22 that has provided the pollution source.

23 MR. GRAINGER: So, then, it's a policy issue
24 for you, in terms of specifically requesting that
25 guideline?

26 MR. BRENEMAN: It's both.

27 MR. GRAINGER: That's, for now, the end of my
28 questions. Mr. Lorimer?

1 MR. LORIMER: I have two or three or four
2 questions. Mr. Slater, in the CEAA screening,
3 which is Exhibit 9.1, table 3 shows the effluent
4 quality, for the two discharges in 1990 and 1992,
5 compared to the 1976 federal guidelines. And my
6 question is, how representative do you believe
7 those two discharges are, of the long term regular
8 performance of that facility?

9 MR. SLATER: I can't speak with any
10 certainty, to how representative they are. The
11 trial discharge evaluation report will probably
12 provide some additional guidance on that. The 1990
13 discharge was a fairly small discharge, basically
14 done as a trial. The '92 discharge, I think, was a
15 full-scale discharge.

16 Given that the 1990 discharge
17 was quite small, it may be that some of the
18 effluent, that was discharged in 1992, was, in
19 fact, retained in the system from years before
20 that.

21 I would advise that you have a
22 look at the trial discharge evaluation report, to
23 get some idea of how representative those might be.
24 Also, you have to recognize that the population was
25 somewhat smaller then, than it is now, though not
26 substantially.

27 MR. LORIMER: Yes, however, does table 3 not
28 -- was table 3 not included in the CEAA screening,

1 to help demonstrate that, in fact, the 1976 federal
2 guidelines were not unreasonable in terms of the
3 quality that had come out of those lagoons? Was
4 that not the purpose of that table?

5 MR. SLATER: That's correct.

6 MR. LORIMER: So, if that's correct, and you
7 then say you don't know how representative that is,
8 of what that lagoon can perform on a regular long
9 term basis, then are we not left with uncertainty
10 as to how feasible those 1976 standards are, in
11 terms of this facility?

12 MR. SLATER: I think it's the best guidance
13 that we have. Those are the only two discharges
14 that have taken place; they're the only thing we
15 can use to evaluate how effective this system is
16 going to be.

17 It obviously leaves open some
18 uncertainty; there's no question about that. But I
19 think, given the combination of the wastewater
20 production rates that are currently happening,
21 which are substantially lower than what was
22 anticipated in the original design -- probably give
23 you some quick numbers on that. Or maybe not so
24 quick...

25 The original design anticipated
26 a population of something around 1400 by the year
27 2000; we're now at somewhere in the range of 800.
28 And the original design anticipated that 1500

1 people would use 240,000 imperial -- or, would
2 produce 240,000 imperial gallons per day of waste;
3 the current rate is something in the range of
4 52,000.

5 So, because we're seeing not
6 only less people, but also less use, I think we can
7 anticipate that the uncertainty is fairly small,
8 that over the next 20 years this system won't be
9 able to perform to those standards, that it has
10 done so in the past.

11 MR. LORIMER: Given the uncertainty about how
12 representative the 1990 and '92 discharges were,
13 compared to the 1976 federal guidelines, in
14 carrying out the CEAA screening, did you review any
15 other information sources, to try to determine
16 whether, in fact, a facility of this type could be
17 reasonably expected to meet those requirements,
18 under the sort of conditions -- under the flow and
19 -- the flow conditions that have been proposed in
20 this licence?

21 MR. SLATER: I guess the only other piece of
22 information, that's probably of some value in
23 evaluating that, was that DIAND did some work, it
24 would be '94 or '95, probably '94, mentioned
25 earlier this morning, the *in situ* bioassay work, in
26 which we actually had rainbow trout in cages in the
27 lagoons. That test work would indicate that, by

1 that time, the effluent quality was probably
2 sufficient to meet these standards as well. And
3 that was two years after the full-scale discharge
4 in '92; two or three years.

5 MR. LORIMER: That specifically related to
6 bioassay?

7 MR. SLATER: Yes, that's correct.

8 MR. ENNS: If I could just provide some
9 correction... there was some water quality work
10 done during that program. Not B.O.D., but there
11 was chemistry done, and nutrients. Sorry.

12 MR. LORIMER: Thank you. And that actually
13 highlights a point that I was going to ask you
14 about, Mr. Slater, and that is that, also in table
15 3, it appears that, for the 1992 discharge, there
16 was no reporting, no information available, on the
17 B.O.D. at that time; is that correct?

18 MR. SLATER: That's correct.

19 MR. LORIMER: So, in fact, we do not know
20 what that number was; and how it would have
21 compared to the 1976 guidelines?

22 MR. SLATER: That's correct. I think it's -
23 - it's correct, in fact, that there wasn't numbers
24 available. On the other hand, it was anticipated
25 that the system would perform -- even the design
26 documentation anticipated that the system would
27 perform to provide B.O.D. levels in that range,
28 anyway. So chances are very good that it actually

1 met those numbers.

2 MR. LORIMER: Do you believe that the
3 facility, as it exists now, which is the facility
4 which is proposed in this application, will, in
5 fact, be able to meet the proposed effluent quality
6 standards, the 1976 federal guidelines, throughout
7 the proposed 20-year term of the licence -- the
8 requested 20-year term of the licence?

9 MR. SLATER: If I had a crystal ball, I
10 could answer that question. However, given current
11 growth rates, the recent growth rates in Haines
12 Junction, and the actual amount of water use
13 requested in this licence, we have to recognize
14 that the water use rate -- they haven't asked for a
15 dramatic expansion in the water use rate -- The
16 water use rate, and the amount of water that goes
17 into the sewage treatment system, are linked. And
18 so, in order to overwhelm the sewage treatment
19 system, you would probably need more water than the
20 Village has asked for.

21 So that, in itself, would
22 require an amendment of the licence. Given the
23 water use rates asked for, there's probably a
24 relatively small uncertainty that the system
25 wouldn't perform to those standards.

26 They've asked for something in
27 the range of - I can get the numbers in front of me
28 - something in the range of doubling the water use

1 rates. And you talked, this morning, about how
2 that would probably be 50%, or something like that,
3 of the capacity of the system.

4 I think the uncertainty is
5 relatively small there. But there's no question, I
6 mean, it's all tied to water use rates,
7 populations, perhaps even climate issues, because
8 we don't know the extent to which the water, that
9 somehow disappears from this system, evaporates or
10 exfiltrates, or what happens to it. There is
11 uncertainty in those areas. But I think we can
12 assume that recurrent use rates, and population
13 growth rates, that this system probably will
14 perform adequately. If it doesn't, then the
15 Village will have to come back and seek an
16 amendment.

17 But I don't see that there is
18 any particular large uncertainty, that warrants
19 making a regulatory decision, now, that the Village
20 will have to come back and seek further
21 authorization 10 years from now, when we also don't
22 know whether it will be necessary then.

23 MR. LORIMER: Admittedly, however, what we've
24 got to go with, at this point, are the projections
25 that are in the application.

26 MR. SLATER: M-hmm.

27 MR. LORIMER: And I'm sensing that you have -
28 admittedly, you used the word "small", but... some

1 uncertainty about that ability of the system to
2 meet that, getting out further into that 20-year
3 period of time. Where, in that period, does your
4 comfort level start to become less than certain?

5 MR. SHERSTONE: I think you're asking two
6 things, Robert, and the first one is, of course, a
7 technical issue. In other words, if everything
8 operates exactly the way it is now, with no
9 changes, and there's no deviations, what's the
10 certainty? And I think Bill said it's very small.

11 But, I mean, we've got to
12 recognize that, for example, if the pipeline route
13 changes, the demand goes way up on Haines Junction,
14 all bets are off, in some ways. Major catastrophic
15 storms come in and, in some way, damage the sewage
16 lagoon... again, those are the sort of
17 probabilities of change.

18 So, I mean, if you're asking a
19 technical question, I think, you know, Bill Slater
20 can answer that. Assuming a constant operation and
21 very little change, nothing outside, no deviations
22 from what's predicted there, if that's the question
23 you're asking, I think Bill can probably answer
24 that for you. If you want 3%, 5%, 7%, I don't
25 think we can give you that, no.

26 MR. LORIMER: I'm asking the technical
27 question, whether the existing facility, as it
28 exists now, can meet the proposed effluent quality

1 standards throughout the 20-year requested term of
2 the licence.

3 MR. SLATER: We don't know the answer to
4 that question.

5 MR. SHERSTONE: If you put some bounds on it,
6 Robert, we can answer that question. If there's no
7 bounds on it, I don't think anyone can answer that
8 question. It's too wide open, I think. You know,
9 you put some bounds on it, and tell us what the
10 limits are, what the excursions will be, and the
11 number of excursions, you know, I think anyone
12 could answer. But, at this stage, I think you're
13 kind of asking us an imponderable.

14 MR. SLATER: I think the other thing that's
15 probably worth pointing out here, is that the
16 mitigation that's specified in the CEAA screening
17 report is specified, as Mr. Grainger's questions
18 alluded to, it's specified to address the policy
19 and legislative requirements surrounding Kluane
20 National Park. The CEAA screening report
21 recognizes there is some uncertainty with the
22 ability of the system to meet that in the long
23 term. Probably not a lot of uncertainty in the
24 next 20 years. To address that, we've established
25 the requirement for that Memorandum of
26 Understanding.

27 The mitigation was not
28 specified on the basis of the system design.

1 MR. SHERSTONE: I think, Robert, if you wanted
2 a definitive answer to that question, you might
3 better address it to the Village of Haines
4 Junction; in other words, they're the people that
5 operate it, they're the people that are going to
6 put the people there or not put the people there.
7 I think a commitment, with some certainty, if
8 they're satisfied with it and they believe they can
9 meet it, those are the people that make that
10 commitment, not the regulator.

11 MR. LORIMER: Well, I did ask that question
12 of the Village of Haines Junction, and I'm now
13 asking it of you in the context of the CEAA
14 screening, which reached some conclusions in that
15 regard. So that's what I was trying to pursue, was
16 the conclusions that were reached in terms of the
17 CEAA screening results. But we can move on.

18 In your presentation, you made
19 a comment, I think with respect to the wetland, a
20 concern about components that, and I wrote this
21 down in quotation marks, so hopefully I got the
22 wording right, "only under the control of the
23 operator". Can you elaborate a little bit on what
24 you meant by that? What do you mean by components
25 that are only under the control of the operator?

26 MR. BRENNEMAN: Bob, I believe I was the one
27 that stated that. And my understanding is that the
28 wetlands is not under the control of the operator.

1 There's so many different variables within the
2 wetland, that, really, the only control the
3 operator has is at the point of releasing it from
4 the sewage lagoon.

5 MR. LORIMER: Can you help me to understand
6 how the processes, that occur in the wetland, would
7 be different from the natural processes that would
8 occur within the lagoons, in terms of the control
9 of the operator?

10 MR. BRENNEMAN: Within the wetlands, it depends
11 on water levels within the Dezadeash, how soon it
12 would flush out the wetlands into the Dezadeash
13 River; what type of year we're having, related to
14 weather conditions; and how well the vegetation can
15 renovate the effluent within the wetlands.

16 MR. SLATER: To add to that, I think the
17 fundamental difference is that the operator can
18 control when the effluent leaves the lagoons, and
19 when it enters the wetland. The operator can't
20 control what happens after that. There is no
21 ability to control/contain effluent within the
22 wetlands, to make sure that treatment occurs or
23 doesn't occur. The last point of control for the
24 operator is at the discharge from the lagoons; they
25 turn the valve.

26 MR. LORIMER: Thank you. I have a question
27 with regard to well number 5. Mr. Slater, I
28 believe that you stated -- and it may not have been

1 Mr. Slater, but I believe it was -- that the CEAA
2 screening, with respect to well number 5, had been
3 carried out as part of documentation that we have
4 as Exhibit 9.1, and that no further CEAA screening
5 would be required if well number 5 -- if the real
6 well number 5 were consistent with the description
7 contained within the CEAA screening. Did I get
8 that correct?

9 MR. SLATER: That's correct.

10 MR. LORIMER: When I look at the CEAA
11 screening, the description that's in there says
12 "Well number 5 behind the Stardust Motel". Is that
13 description consistent, in your mind, with the
14 proposed location of well number 5, that was shown
15 this morning in the presentation by the Village?

16 MR. SLATER: Yes, it is.

17 MR. LORIMER: Thank you. I have no further
18 questions.

19 MR. GRAINGER: Thank you, Bob. I believe we
20 have a couple of questions from our legal counsel,
21 and then I've got one.

22 MR. GOWER: This question -- well, there's
23 a couple of questions, they could be rolled into
24 one, for Mr. Sherstone. As I understand it, two of
25 your concerns, arising out of clause 7 and the
26 whole issue of enforceability, you mentioned that
27 DIAND enforcement officials may have to be
28 designated as enforcement officers under the Yukon

1 legislation, in order for them to do their work
2 according to sections 37 to 39 of the Waters Act.
3 And secondly, that there was an issue about private
4 correspondence between Yukon Health, to the
5 municipalities, or the users of water, which DIAND
6 couldn't require production of in order to access
7 the document.

8 If both of those concerns were
9 addressed, such that DIAND enforcement officers
10 were, in fact, made enforcement officers under the
11 applicable Yukon legislation, and there was some
12 form of a protocol developed whereby DIAND Water
13 Resources and enforcement would be routinely copied
14 with that correspondence, would those points
15 alleviate your concerns?

16 MR. SHERSTONE: If it were possible, yes, they
17 would.

18 MR. GOWER: If it were possible.

19 MR. SHERSTONE: Yes. It would be basically
20 dependent on the YTG's willingness to designate
21 federal officials as agents of their Act.

22 I don't know the answer to
23 that, and we certainly haven't explored it with
24 them, no. I'm just going on legal advice I
25 received from Justice Canada, that, unless we are
26 designated, we can't take action in those areas.

27 MR. GOWER: Thank you.

28 MR. GRAINGER: Just a comment on that, I mean,

1 prior to Environmental Health officials being
2 devolved to the Yukon Government, they were
3 appointed as health officers under the Act, and
4 routinely administered Yukon health regulations,
5 prior to devolution, I believe. A comment on that?
6 I mean, to me, in my mind, that has happened.

7 MR. SHERSTONE: I think you're referring to
8 federal health officials, vis-a-vis YTG health
9 officials.

10 MR. GRAINGER: Yes.

11 MR. SHERSTONE: And maybe, John, I don't know,
12 certainly it's never been a question of Yukon
13 Waters Act vis-a-vis either federal health or
14 territorial health. We were never designated under
15 the federal health regulations.

16 MR. GRAINGER: Well, no, I'm -- yeah,
17 basically what -- and Lynn will chime in here, in a
18 second -- what I'm saying is, federal employees,
19 when they were Health Canada employees, were health
20 officers administering Yukon legislation, and
21 appointed accordingly. Lynn?

22 MS. RICHARDS: That's correct, we were
23 appointed as health officers. Just a note to say
24 that there's criteria for that, and that's a
25 certification of Public Health Canada. And that
26 requires an accreditation education process and
27 sitting of a Board. So, even a person with a
28 doctorate in anything, or a doctor, cannot become a

1 health officer without those credentials. And,
2 rightly so, a medical health officer has criteria
3 as well, which is different than a health officer.

4 MR. GRAINGER: Right, okay. Thank you. I've
5 just got a last question, and we'll see if there's
6 anything else from other Board members, and then
7 we'll move on.

8 With respect to the
9 applicability of these 1976 guidelines, in your
10 CEAA deliberations, over the last couple years now,
11 I guess, did you ever consider that, if the
12 effluent was of the quality indicated in the
13 previous licence, the sixty forty-five, the numbers
14 that were in the previous licence, were discharged
15 to the park boundary, to the wetland and on to the
16 Dezadeash River, were you convinced that that would
17 have a detrimental environmental impact?

18 MR. BRENEMAN: It was the uncertainty with it,
19 and there would be a burden of proof, on the
20 proponent, to prove otherwise.

21 MR. GRAINGER: That's reasonable, in terms of
22 the burden of proof, all right. But conversely,
23 then, are you satisfied, and did you do any site
24 specific effluent renovation predictions that, if
25 the effluent, you know, was of the quality
26 contained in the 1976 guidelines, would that have a
27 detrimental impact?

28 MR. BRENEMAN: Again, our desire was -- and it

1 follows policy, and working with the Village of
2 Haines Junction, to allow that level of effluent
3 doesn't meet what our policy states within Parks
4 Canada but, because it was going into the wetland,
5 we were going to use that as an acceptable level.

6 MR. SLATER: The other point worth making on
7 that is, for environmental assessment purposes,
8 where there are policies and guidelines that have
9 been applied effectively in other locations in
10 Canada, we certainly use them for environmental
11 assessment. And, in this case, that guideline has
12 been used in parks and other places, I believe.
13 And so it was felt that it was appropriate to apply
14 it in this case.

15 MR. GRAINGER: The wetland in question is
16 immediately adjacent to the Alaska Highway right-
17 of-way, on the west side of the road. If that
18 wetland was on the other side of the highway, just
19 outside the park boundary, as opposed to being just
20 inside the park boundary, and based on the work
21 that was done by Klohn Leonoff, that indicated that
22 there would be sufficient effluent renovation
23 coming out of the wetland, would you have been
24 satisfied at that point?

25 MR. BRENNEMAN: Again, the effluent, the
26 quality of the effluent that was coming out of the
27 wetland, as what was coming out of the sewage
28 lagoon at the earlier one, 1991, we would have been

1 satisfied at that level. Which is greatly reduced
2 of what we require and do in national parks now.

3 MR. GRAINGER: So, just because the wetland is
4 just inside, as opposed to just outside, then
5 you're asking Haines Junction and us to consider a
6 much more stringent standard?

7 MR. BRENEMAN: No, that wasn't the point I was
8 trying to make. The point I was trying to make is
9 that, because it's going within a wetland, and
10 renovating it further, that we would have a further
11 renovation of the effluent quality and a better
12 standard. And if it met that better standard, yes,
13 we would have allowed it. But if it did not meet
14 that, we would -- Sorry, I'll go back one.

15 If the wetland was outside the
16 park, we would probably be asking for a higher
17 standard than the 1976 federal guidelines standard,
18 because that's what we apply inside national parks.

19 MR. GRAINGER: But we don't have any
20 information on that standard, that you're talking
21 about, now?

22 MR. BRENEMAN: We were using the Banff as a
23 model, and that's provided within the CEAA, the
24 environmental assessment that was provided to the -
25 - I believe that was provided to the Board.

26 MR. GRAINGER: Okay, so you're referring to
27 the Banff standard. That's a little bit more
28 stringent, but not much more.

1 Did you examine, carefully, in
2 your CEAA screening deliberations, the predicted
3 amount of effluent renovation that was expected in
4 that wetland? Did that factor into any of your
5 thoughts at the time?

6 MR. SLATER: I think I can address that, and
7 I'm going to address it, a bit, in conjunction with
8 your earlier question, about your hypothetical
9 question about the wetland being on one side or the
10 other side of the park boundary.

11 There is no question that the
12 location of the wetland was critical in making the
13 decision. The effluent is discharged into a
14 national park. We didn't look, in any great
15 detail, at the level of renovation that occurs in
16 that wetland. It is presented, to a certain
17 extent, in the application. We didn't look any
18 further than that, beyond what's in the evaluation
19 that was done in 1992 with the discharge.

20 MR. GRAINGER: I won't belabour this any
21 longer, but let me ask you one -- Mr. Slater, one
22 more question. Would you agree, though, or is it
23 your view, that the effluent renovation, that could
24 be achieved, as indicated in the Klohn Leonoff work
25 in the early '90s, would meet both the Banff and
26 the 1976 guidelines?

27 MR. SLATER: That's probably very true, and
28 I think that's why Parks Canada has said yes, we

1 can accept the 1976 guidelines, as opposed to what
2 they would more usually accept. Because they're
3 recognizing that there is some renovation, even
4 though that renovation is occurring, already, in
5 the national park. It is occurring in the national
6 park, before it reaches the Dezadeash River.

7 MR. GRAINGER: Thank you. Any other
8 questions, then, from other Board members?

9 Okay, we'll move on.
10 Environment Canada, do we have a presentation from
11 you? Mr. Enns?

12 MR. ENNS: Yes, thank you.

13 **PRESENTATION BY ENVIRONMENT CANADA**

14 MR. ENNS: Just at the outset, I'd like to
15 clarify that Environment Canada does not have any
16 regulations pertaining to drinking water.

17 The other comment I'd like to
18 make is with respect to DIAND's comments on clause
19 4 of the draft licence... that we share some of the
20 concerns regarding enforceability that they have
21 outlined; that it presents enforceability problems.

22 With respect to our
23 intervention on the current application, we don't
24 have any particular concern. We feel that the
25 things that we've asked for in our intervention
26 have been met.

27 I would like to comment on the

1 discussions that have been going on pertaining to
2 the design capacity of this lagoon. And you will
3 note, in our intervention, that we had no comment
4 on the duration of the licence, and so you could
5 presume from that, that we were not objecting to
6 the 20-year licence application. The reason we
7 were not objecting to that application is that we
8 believe, based on the work that we've done, on the
9 Whitehorse lagoon over the last three years, that,
10 although we cannot guarantee it, you know,
11 definitely there is a possibility that, in 20
12 years, or 18 years, or 15 years, or at some point
13 in time, that they may have a difficulty meeting
14 these more stringent criteria. On the other hand,
15 we would not say that they may not -- we would not
16 say that that's necessarily true. We believe that
17 it is quite possible that, within the term of this
18 licence, they will meet this criteria. And that's
19 based on our observations of the performance at the
20 Whitehorse lagoon.

21 Now, granted, the Whitehorse
22 lagoon, although it shares many commonalities, in
23 design, with the Haines Junction lagoon, it's
24 essentially a similar facility, the primary
25 difference is the depth of the final pond. And
26 there is some difference in sewage strength, as
27 well, coming in.

28 And I should just explain my

1 comment there. It's been painfully recognized that
2 there is little data available on the performance
3 of this system since it's been built. And, you
4 know, the reason that is, is because there's been
5 virtually no discharge.

6 By coincidence, Environment
7 Canada started, two months ago, a program at the
8 Haines Junction lagoon, with the cooperation of the
9 community. And the reason we're doing that is not
10 because of this hearing; it really is coincidental.
11 Basically, we've developed models to predict the
12 performance of renovation in the Whitehorse lagoon,
13 and we wanted to find another site, in the Yukon,
14 which had similar design characteristics, but which
15 would have a slightly higher sewage strength, in
16 order to see how sewage strength affects those
17 models. And so, two months ago, we did start a
18 fairly intensive sampling program at the Haines
19 Junction lagoon.

20 So I can say that, with the
21 data that we have to date, the sewage is maybe 25
22 to 33% stronger, in sewage strength, than
23 Whitehorse. But, so far, the performance that
24 we've seen follows the patterns that we've seen in
25 Whitehorse, in terms of treatment. And that is
26 that there is a phenomenal amount of treatment that
27 occurs within the first eight weeks that the lagoon
28 becomes ice-free.

1 For example, the Whitehorse
2 lagoon, which only has, really, 10 months of
3 storage, right now, would have no problem meeting
4 the criteria that you've set out for Haines
5 Junction. The Haines Junction lagoon, at the
6 present time, we're focusing our study on the first
7 two cells, because the third cell is basically
8 standing water. It has intermittent flow into it.
9 You know, the last discharge was '82; it's taken
10 eight years -- you know, the amount of water that
11 they might have to discharge, in order to maintain
12 equilibrium this year, could be very small,
13 actually, if your only objective was to maintain
14 the level of the pond over a 12 month period.

15 So, in other words, there is an
16 extraordinarily long retention time in the Haines
17 Junction lagoon. And, in fact, if they discharged
18 the third pond this year, it could take another
19 eight years, at current flow rates, for the pond to
20 fill.

21 So the retention times, that
22 are available in the Haines Junction lagoon, even
23 though the lagoon strengths are a bit higher, the
24 retention times are very much longer. So there's
25 that much more time for effluent to be of a good
26 quality.

27 So, one of the things that will
28 need to happen, is that we will need to get a

1 better handle on the water balance in the lagoon.
2 We don't have a very good handle on the water
3 balance. We don't know, if you did drain the final
4 cell, exactly how long it would take to refill.
5 And, certainly, evaporation accounts for part of
6 it... there is a net loss. If you take the
7 precipitation in the year, in Haines Junction, and
8 the evaporation, the evaporation exceeds the
9 precipitation in the pond. So there is a net loss
10 each year. And with these long retention times,
11 that is a factor. We don't know how much of it's
12 leakage, really, though.

13 So, I guess our opinion is
14 that, yes, there is a small chance that, within the
15 20-year window, there could be a water quality
16 problem, but our opinion is that, unless there's a
17 catastrophic change in the way Haines Junction does
18 business, we're going to have lots of lead time to
19 think about how that's going to be addressed. It's
20 not something that's going to have to be decided in
21 a year or even two years time -- time frame.

22 And that's the view that we
23 went into reviewing this application with, and why
24 we didn't express concern about the 20 year window.

25 Just to give you some more
26 examples, in the Whitehorse lagoon, the coliforms,
27 in the August 2000 sampling, were less than 6. Six
28 was the highest number. And we're talking about

1 counts of 400 being allowed at Haines Junction.
2 The B.O.D.'s are less than 10 at Whitehorse. At
3 Haines Junction, we see, because of the remnant,
4 the fact that there's multi-year storage, by the
5 end -- even though there's no renovation, during
6 the winter time, to speak of, we still see, you
7 know, good quality water in the downstream end of
8 the Haines Junction lagoon, because of the fact
9 that there's multi-year storage.

10 And, again, you know, suspended
11 solids... as long as the discharge is not occurring
12 at a time when there's an algal bloom occurring,
13 there shouldn't be a problem with suspended solids.
14 And that's why, in our intervention, we asked for a
15 late summer discharge window, rather than early
16 summer. Because the algae bloom occurs almost
17 immediately after the ice comes off; the algae
18 growth becomes quite prominent. And, subsequently,
19 it abates.

20 And I think that's pretty well
21 -- that's all I have to say. Thank you.

22 MR. GRAINGER: Thank you, Mr. Enns. Any
23 questions from DIAND/Parks Canada, of Environment
24 Canada?

25 MR. SHERSTONE: No questions, thank you, Mr.
26 Chairman.

27 MR. GRAINGER: Any questions from the
28 applicant, to Environment Canada?

1 MR. FARYNOWSKI: No questions.

2 MR. GRAINGER: Ms. Richards, anything for
3 Environment Canada, from YTG Environment Health?

4 MS. RICHARDS: Not at this time, thank you.

5 MR. GRAINGER: Board members?

6 **ENVIRONMENT CANADA QUESTIONED BY THE BOARD**

7 MR. GRAINGER: I've just got one, Mr. Enns.
8 In your intervention, you're requesting an LC50
9 bioassay, or bioassay testing. Is there any
10 evidence of any fish anywhere near that wetland,
11 that you're aware of?

12 MR. ENNS: Any what?

13 MR. GRAINGER: Any fish.

14 MR. ENNS: I imagine when it's inundated
15 with the Dezadeash River, that there's quite a high
16 probability that there would be fish at that time.
17 The point is, I think, that the LT50 is an end of
18 pipe test. The wetlands are a natural wetlands,
19 they're not an engineered structure, you have no
20 control.

21 MR. GRAINGER: Would you not agree that the
22 requirement for an LC50 -- or a bioassay testing,
23 LC or LT50, is to determine if a fish is going to
24 be harmed; and if there's no fish anywhere near
25 this thing, I guess I'm curious as to why you would
26 ask a proponent to go through the cost of testing
27 bioassay for toxicity for fish.

1 MR. ENNS: No, the LT50 is not to
2 demonstrate that fish won't be harmed in the
3 Dezadeash River. The LT50 is to demonstrate that
4 there is a quality of effluent that achieves
5 compliance with the Fisheries Act. The Fisheries
6 Act is an end of pipe regulatory instrument, which
7 means that the water that comes out of that lagoon
8 must not be deleterious to fish. And it's not just
9 that there's fish at the point of discharge. The
10 way the Fisheries Act is worded, is that it enters
11 or may enter waters frequented by fish. So the
12 point of entry doesn't have to be immediately at
13 the point of discharge.

14 So the LT50 is not to predict
15 whether there's going to be harm to fish; it's to
16 demonstrate compliance with the Fisheries Act, at
17 the end of pipe. And the reason we ask for it is -
18 - that is the reason we ask for it. And one of the
19 reasons we believe it's a useful tool, as well, in
20 addition to the simple regulatory observation, is
21 that it is the only test that, because it's not
22 parameter-specific, it allows you to get some idea
23 of treatment efficacy when you're dealing with
24 something that has a host of potential contaminants
25 in it, and not just three or four.

26 MR. GRAINGER: Well, given that what's being
27 requested here is really, really, good secondary
28 quality effluent, that's passing overland, through

1 an overland ditch, into a wetland for further
2 renovation that's likely to achieve tertiary
3 quality levels, do you believe that there's a -- do
4 you have a fear that there is a fisheries issue
5 here?

6 MR. ENNS: We have a responsibility to
7 insure that the Fisheries Act is complied with.

8 MR. GRAINGER: Well, that would lend me to
9 believe that you think there could be a fish
10 toxicity issue; that fish might get killed by this
11 thing. If fish aren't going to get killed, there's
12 no Fisheries Act implications, are there?

13 MR. ENNS: It's a \$400 test to provide
14 comfort; that's what it is.

15 MR. GRAINGER: Okay, I'll move on. Leigh, any
16 questions from you?

17 MR. GOWER: No.

18 MR. GRAINGER: Bob?

19 MR. LORIMER: No questions.

20 MR. GRAINGER: Does anybody want a break?
21 We're probably close to wrapping up; does anybody
22 need a break? We've been almost two hours. Does
23 anybody want to take a short break and then come
24 back for closing responses and closing remarks? Or
25 can we just keep going? Do you want a break?
26 Okay, we'll take a five minute break.

27 (Proceedings adjourned)

28 (Proceedings reconvened)

1 MR. GRAINGER: We'll get going again, and try
2 and conclude here. I've just been informed that
3 both YTG Environmental Health and Environment
4 Canada have left for the day, and didn't have any
5 other closing remarks to give us, so that's fine.

6 To the applicant, then... do
7 you have any responses to any of the interventions,
8 or anything you've heard today, in the way of
9 responses?

10 MR. FARYNOWSKI: One response regarding what
11 we've discussed earlier in the day, Mr. Chair, is
12 regarding the easement through the Champagne-
13 Aishihik First Nation land, the pasture. And
14 there, in fact, is a recognized easement, that's
15 legally surveyed; it was carried over in the final
16 agreement, and we have a copy of it here. So that
17 is not a concern. Mr. Boehmer dug it out over
18 lunch, and its registered plans are here, if
19 anybody from the Board would like to see it.

20 And just in conclusion, I would
21 like to say that we feel --

22 MR. GRAINGER: Sorry, John. Do you want to
23 save your closing remarks....

24 MR. FARYNOWSKI: Okay.

25 MR. GRAINGER: Just asking, right now, if you
26 have any responses to any of the interventions or
27 anything. We'll give you a chance for closing
28 remarks in a minute.

1 MR. FARYNOWSKI: No, no other responses, except
2 this easement.

3 MR. GRAINGER: DIAND/Parks Canada... closing
4 remarks. Anything else you want to say to us?

5 MR. SHERSTONE: I guess it's just in support of
6 what DOE said, and which should perhaps give some
7 more comfort to the fact that, what the level of
8 comfort is with this sort of whole sewage system
9 meeting the, sort of, requirements over the 20
10 years. So I think that's encouraging to hear from
11 DOE. Other than that, we have no closing remarks,
12 thank you very much.

13 MR. GRAINGER: Okay, thank you. There's no
14 members of the public here, to make any statements
15 to us. So the last word -- oh, sorry.

16 SPEAKER FROM THE AUDIENCE:
17 Thank you. No, I don't.

18 MR. GRAINGER: The last word goes to the
19 Village of Haines Junction, the applicant.

20 MR. FARYNOWSKI: Just to further emphasize what
21 I said earlier today, we feel that number 5 well is
22 an important issue today, and in light of what I've
23 heard from the federal authorities, I think that
24 the Board -- we're asking the Board to please
25 consider giving us approval on that well at this
26 time. Because it's something that has to be done
27 and, if we have to go through a process again, it
28 becomes time-consuming for a lot of us, and as well

1 as expensive to a small community with a small
2 budget.

3 And, as well, to emphasize the
4 20-year licence that we would like to see happen.
5 And there seems to be a pretty good level of
6 comfort, from all the authorities that have worked
7 with this project over the years. And we feel
8 that, with the water use that we've asked to be
9 able to use, the amount of water, that there is a
10 ninety-plus per cent chance that there won't be any
11 problems with the effluent discharge.

12 Now, if, for some reason, we
13 become a much bigger village, we'll have to be back
14 for an amendment, anyway, because we'll need more
15 water. So, as long as we're not exceeding the
16 water use we've asked for in the licence, that we
17 won't have any problems with the effluent.

18 And on top of that is
19 insurance... we have the agreement, the Memorandum
20 of Agreement with Parks, to work with us. And
21 because of the time it takes for the levels to
22 change in there, it's nothing that's going to get
23 into a situation where it's in panic mode. So
24 we'll have time to make adjustments before
25 discharge, if any are required.

26 I feel confident that we won't
27 have to, but there are unforeseen things. We could
28 get rainstorms and hurricanes, and we could have an

1 earthquake that destroys our dyke. I mean, those
2 are things we can't predict. And I don't think
3 it's fair to ask for those kind of things to be
4 predicted from us. We feel that we can meet those
5 guidelines, we've discussed it with Parks, we've
6 went through all parties and had a number of
7 meetings, and we feel comfortable with it. And we
8 are concerned about the environment, and we are
9 concerned about the park. Because, without the
10 park, there's no Haines Junction. Although, there
11 could be a park with Haines Junction gone.

12 So, we need the park, and we
13 want to be able to work with them. And our
14 relationship with the park has been excellent over
15 the past few years. It wasn't that good a few
16 years before that, but it is good. And I think
17 that, when they say they would help work, that they
18 will.

19 And I want to thank everybody
20 here, that came today, and especially all you Board
21 members, for all the time and effort that you've
22 taken to listen to these interventions, hearings,
23 comments. We were, perhaps, not as prepared as we
24 should have been, on some items, but I think we've
25 found the information that we were short of.

26 And thank you, again, for the
27 opportunity to be here.

28 MR. GRAINGER: Thank you, Mr. Mayor. And with

1 that, then, that concludes this hearing. The
2 hearing is adjourned.
3 (Hearing concluded at 5:05 p.m.)